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FEB 20 1923

DESCRIPTIVE CATALOGUE

**Fruit and Ornamental
TREES**

Grape-Vines, Small Fruits
Shrubs, Roses, Plants, Etc.



W. T. HOOD & CO.
OLD DOMINION NURSERIES
RICHMOND, VIRGINIA

A Few Words of Advice to Customers

PLEASE LET US HAVE YOUR ORDERS EARLY
WHETHER THROUGH THE MAILS OR THROUGH OUR AGENTS

ORDERING THROUGH OUR AGENTS

These agents have been employed by us after careful inquiry into their characters, they having been recommended to us by prominent citizens in high standing as trustworthy and reliable men. We respectfully urge all our customers to order through them if convenient, and in so doing they will save freight charges; for by taking a large number of orders for delivery at a certain point there is a great reduction in the freight, which we can afford to prepay. We endeavor to get a good agent in every county; though, if there be no agents canvassing in your neighborhood, you will, of course, be obliged to order direct from us through the mails.

In ordering through our agents, please see that the agent writes your name and place of delivery plainly at the top of the order, and also your postoffice, and the number of miles and the direction you live from the point of delivery. The signature at the bottom of order must be made only by the person ordering.

GUARANTEE OF GENUINENESS

We exercise the greatest care to keep our varieties pure and true to name, and hold ourselves in readiness at all times to replace, on proper proof, all stock that may prove otherwise, or refund the amount paid; but it is mutually agreed between the purchaser and ourselves that we shall not be liable for any amount greater than the original purchase price.

ORDERING THROUGH THE MAILED

Please state if we shall ship by express or freight. Be careful to write your name, shipping directions, and varieties plainly, and whether you want standards or dwarfs. If, however, the selection is left to us, we shall select according to our best judgment and long experience, taking into consideration the best varieties suited to the section from which the order comes. Orders from persons who are unknown to us shou'd be accompanied by cash or satisfactory references. We deliver the stock at the depots and express offices, in Richmond, in good order. We take a receipt for them, and our responsibility ceases there. We are not responsible for loss or damage to goods in transit.

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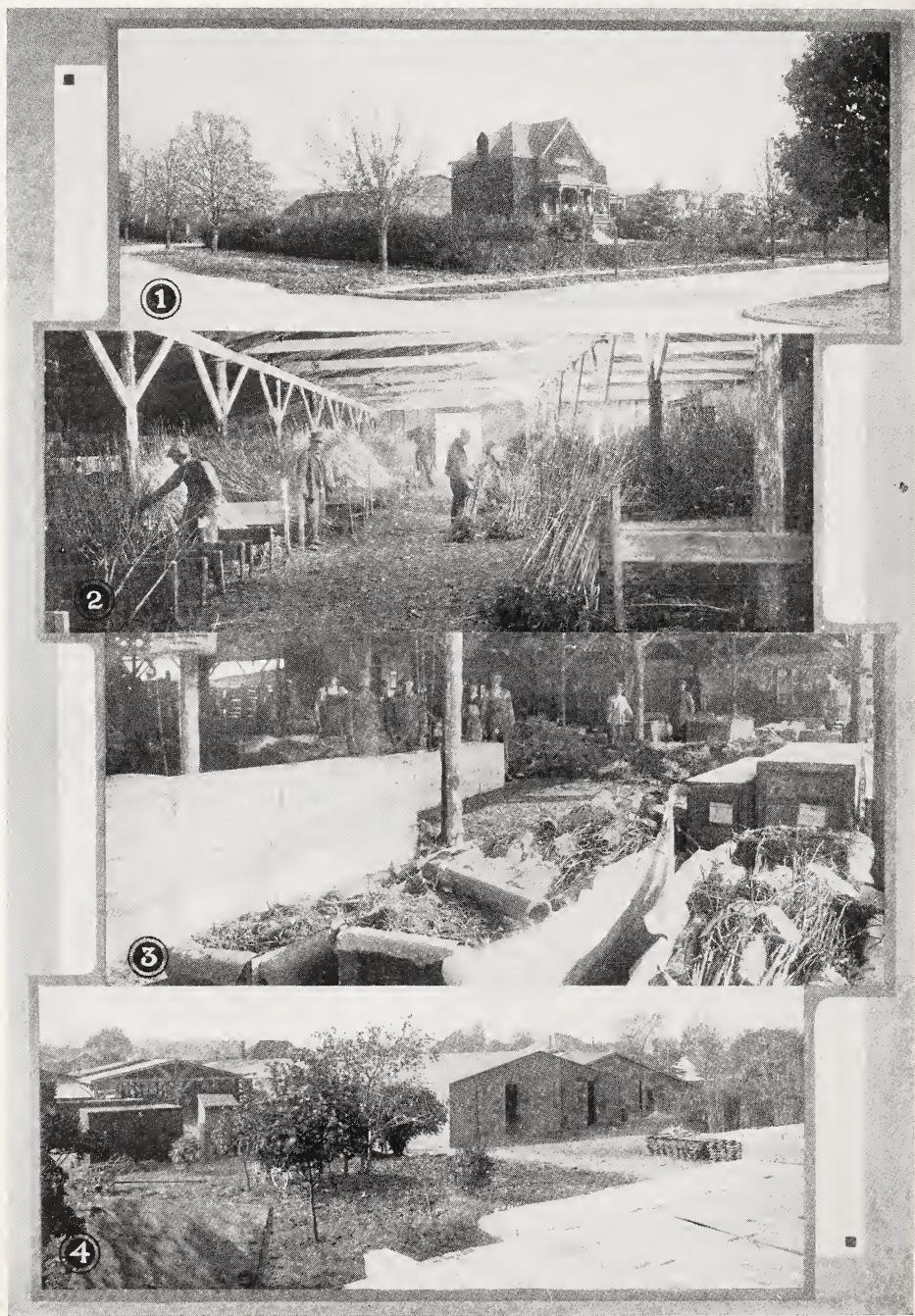
DESCRIPTIVE CATALOGUE OF
Fruit and Ornamental
T R E E S
Grape Vines, Small Fruits
Shrubs, Plants, Etc.



CULTIVATED AND FOR SALE BY
W. T. HOOD & CO.
W. TAYLOR HOOD KENT WILLIAMS HOOD
Old Dominion Nurseries
RICHMOND, VIRGINIA

OFFICES: Ginter Park, Chamberlayne Avenue, on First Street. (Lakeside)
Car Line, one and one-half miles from Richmond.

NURSERIES: HENRICO COUNTY



1. Office Building, Packing Houses in rear.
2. Billing Room in Packing Shed.

3. Packing House Scene.
4. Packing Houses, Tree Boxes in Foreground.



Introductory

After an experience of fifty years in the nursery business, all of which time has been spent in business at this place, we take pleasure in presenting this new edition of our catalog to our friends and patrons, hoping that they will accept our thanks for the generous patronage and confidence they have bestowed upon us in the past. It will be our aim in the future, by strict attention to business and honest dealing in all transactions, to merit a continuance of the same. We will direct our efforts and spare no pains or money to produce the very best stock that can be grown, and recommend such fruits as have proven to be of value. New fruits that have not been fully tested, we will recommend planting only in small lots, which will be the means of disseminating them, and may be the cause of having many new fruits that will prove to do as well and be as popular all over the country as the old and well known varieties.

Since establishing our nurseries, improvement has been made in growing first class stock, and people generally educated to know what are good trees. When W. T. Hood started in the nursery business fifty years ago, he got his early training under Franklin Davis, and as soon as he got the trees grown to the planting age, planted out orchards in the nursery grounds. Apples, to see the merits of the fruit. Peaches to see the merits, also to see that they were true to name and to cut buds from every two years, so as to keep stock true to name in the nursery, and we have always wanted to have commercial orchard, but did not have the room to spare at our nurseries at Richmond, but winter of 1908, with I. Howard Williams, bought what we thought was an ideal farm on the C. & O. R. R., between Greenwood and Afton, Virginia, and we have at present one hundred and thirty acres planted with apples and peaches. The past season, we shipped over 8,000 carriers of peach and have 1,200 barrels of apples. Our peaches have been bearing every year, commencing the third year from planting, and most all trees have been bearing too heavy crops of all the varieties we grow, which was nearly one hundred varieties. These all proved true to name except two varieties. We also had one variety that we got a party to cut buds for us from some orchard in the Blue Ridge, and they were mixed with another late variety. We are very proud of our record, as we have always been afraid that there was danger of getting peach mixed in cutting buds on carelessness of a budder in leaving stick in box and putting in other buds with it.

Of apples and pears, plums and cherries, there is not any excuse for a nurseryman to send out trees not true to name, as every good nurseryman should be able to tell them apart unlabeled.

While we have been cutting grafting scions from our orchard, we cut most of our budding scions from the nursery, cutting from the strongest and best trees. In budding peach from bearing orchards, nurseryman do not get a fair proportion to make trees as many of the buds are bloom buds, but every nurseryman should have his test orchard, so as to make renewal every two or three years of a row to get buds from.

Our motto is to send out only the highest grade stock. While we do not claim to sell cheaper trees than any other nurseryman, we are satisfied that our stock will compare favorably with other reputable concerns and our prices are as cheap as can be made for stock we offer. While we endeavor to secure only the best class of help, and use every effort to satisfy our patrons, if mistakes occur, we are always willing to correct same. Cheap nursery and ornamental stock is dear at any price and we find that the planters generally, consider quality first and being assured of that, they are satisfied to pay a fair price for a satisfactory article.

Our nurseries are located five miles north of the city and we employ throughout the year in propagating and cultivation of our stock, a large force of hands and teams.

We find our home grounds admirably suited for producing extra fine specimen of shade and ornamental trees—shrubbery, roses, etc. For fruit trees, however, it is best to change land and we seldom plant on the same ground more than once. We now have 600 acres of our own under cultivation and we lease, usually about 200 additional acres, for from three to five years—securing the most desirable locations for the purpose of propagating only our unexcelled, high grade nursery stock.

We have often been complimented by brother nurserymen on the extra growth our trees make. This we attribute to the frequent change of location, and our long experience and close personal attention.

We hope in future, as in the past that we will receive our share of your patronage, assuring you that we will endeavor to merit the same.

Remarks

To the planter or purchaser of Nursery Stock at least three things are indispensable: First, varieties true to name; second, healthy, vigorous, well-matured trees or plants; and, third, careful and judicious packing, without which all may be lost.

We give the most careful scrutiny to the propagation of varieties, endeavoring by all methods known to us to protect ourselves from error or imposition, and rejecting anything of which we have reason to feel suspicious. By such careful and constant watchings and attention we are warranted in offering our stock as pure and absolutely true to name.

Our soil being of a character best suited to produce the healthiest conditions of growth—that solid, firm texture of the wood, with abundant fibrous roots, so necessary to successful transplanting—we are enabled to offer the products of our Nurseries with entire confidence to planters in all sections of the country.

We give to our packing and shipping careful personal supervision, and to still further protect our patrons, as well as ourselves, against loss in this direction, we employ the most skilled and competent hands to assist us.

By careful consideration of the wants of our trade and faithful attention to business, we hope to continue to merit and receive a share of the patronage of lovers and buyers of choice fruits and ornamentals.

Guarantee of Genuineness

While we exercise the greatest diligence and care to have all our trees, plants and vines true to label, and hold ourselves in readiness, on proper proof, to replace all that may prove untrue to label free of charge, or to refund the amount paid, it is mutually understood and agreed to, between the purchaser and ourselves, that our guarantee of genuineness shall in no case make us liable for any sum greater than that originally received for said trees, etc., that shall prove untrue.

Advice to Planters

Select thrifty young trees in preference to old or very large ones; the roots are more tender and fibrous, and they bear transplanting better and are far more apt to live; they can also be more easily trimmed and shaped to any desired form, and in the course of a few years will usually outstrip the older ones in growth.

Selection of Varieties

Be careful to choose such as you know to be suited to your section; or leave the selection to us. It is fair to presume that, with the experience of more than forty-five years, giving all our time and talent to the subject, our information must be at least equal to that of the average planter. Varieties are almost innumerable, and many of them either worthless or of little value. Great injustice has been done by the compilation of long lists, which serve only to induce the orchardist to plant a large assortment, many of which generally fail to give satisfaction. A few good varieties, ripening in succession throughout the season, are far preferable for all purposes. What the planter particularly needs is a sufficient number of those varieties which have been tried and have proven themselves worthy of cultivation.

It is our determination to propagate and recommend only such as we confidently believe to be of superior quality.

A few words as to quality of stock may not be inappropriate. Some are induced by low prices to plant second- or third-class trees, saying "Your first-class stock costs more." Now this is as it should be. It costs more simply because it is worth more—worth more to the nurseryman, and worth tenfold more to the planter.

It is useless, yea absurd, to expect a nice, thrifty, productive tree from a poor, weak, stunted scion. Men deal not so in the animal kingdom; the best of the flock is always the choice of the well-informed breeder.

Let us insist upon it that you plant nothing but strictly first-class trees, which will always cost first-class prices.

The Soil

A rich loam is the best for fruit, made sufficiently dry by artificial draining, if necessary; but all soils can be made available by judicious treatment.

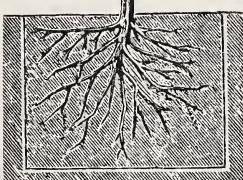
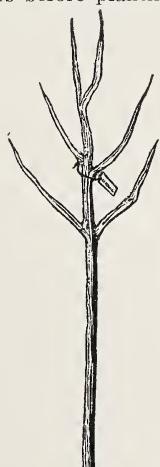


The right way to heel-in trees

top-pruning until the following spring, which should be done before the buds begin to push. If not prepared to plant when your stock arrives, "heel-in," by digging a trench deep enough to admit all the roots, and setting the tree therein at an angle of about 45 degrees, carefully packing all earth about the roots and body of tree about one foot above ground, taking up when required. Never leave the roots exposed to the sun and air.

Preparing the Roots

Immediately before planting, all the bruised or wounded parts, where cut with the spade, should be pared off smoothly, to prevent decay and to enable them to heal over by granulation during the growth of the tree. Then dip them in a bed of thin mud, which will coat over every part evenly, and leave no portion in contact with the air, which accidentally might not be reached by the earth in filling the hole. The use of water in setting the earth amongst the roots will be found eminently serviceable. Let there be a few quarts poured in while the hole is being filled. If the trees have been out of the ground for a long time, and become dry and shriveled, they should be immersed in water twenty-four hours before planting. Fruit trees sometimes remain with fresh and green branches, but with unswollen buds, till midsummer; instead of watering such at the roots, let the body and branches be wet every evening regularly, about sun-down, with a water-pot or spray, and it will in nearly all cases bring them into active growth.



The right way to prune and plant a tree

Preparation for Planting

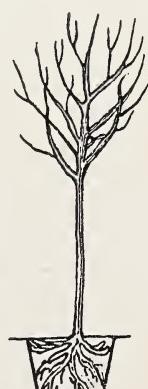
Plow and subsoil repeatedly, so as to thoroughly pulverize to a depth of 12 to 15 inches. When planting upon the lawn or grass plots, remove the sod for a diameter of 4 or 5 feet, and keep this space well worked and free from weeds. Dig the hole deeper and larger than seems necessary, to admit all the roots in their natural position, keeping the surface soil and subsoil separate. Cut off broken and bruised roots and shorten the tops to half a dozen good buds, except for fall planting, when it is better to defer

Shortening-in the Branches

However carefully trees may be taken up, they will lose a portion of their roots, and if the whole top is allowed to remain the demand will be so great upon the roots that in many cases it will prove fatal to the tree. To obviate this it becomes necessary to shorten-in the branches, which should be done at the time of planting, and in a manner to correspond with the loss of roots. If the tree has lost the greater portion of its roots, a severe shortening-in of the branches will be necessary; if only a small portion of the roots have been cut off, more moderate pruning will be sufficient. Particular attention to this matter will save many trees that otherwise would perish.

Planting

Fill up the hole with surface soil, so that the tree will stand as it did when in the nursery, after the earth is settled, except Dwarf Pears, which should be planted deep enough to cover the Quince stock, upon which they are budded, 2 or 3 inches. Work the soil thoroughly among the roots, and when well covered tramp or ram firmly with the feet or a post rammer. Set the tree as firmly as a post, but leave the surface filling (of poorer soil) light and loose. No staking will be required except with very tall trees. Never let manure come in contact with the roots.



The wrong way to plant a tree



A dormant shrub as it is sent out by the nurseryman

the same treatment. It is indispensably necessary that the ground should be well cultivated to obtain fine fruit. From the neglect of this arises so much of the dissatisfaction of tree-planters. Give to your trees for a few years a clean, mellow and fertile soil, and they will bend under copious loads of fine fruit, and yield to the cultivator his reward. The experiment only is enough to convince any one of the advantage of good culture. Dwarf Pears, more than any other tree, require a deep, rich soil and clean cultivation. In cultivating, great care should be taken not to injure the trees by rubbing the bark off, which will often happen if careless hands (or those that are not) use long singletrees. We use a singletree 18 inches long, always wrapping the end and trace next to the row, and seldom bark a tree. The best tools are a one-horse turn-plow (which every farmer or fruit-grower should have) and a cultivator. We try to cultivate our Nursery after every rain from April to October. The best crops for an orchard are those requiring summer culture—such as potatoes, beans, etc. Winter crops are little better than no culture. Rye is decidedly injurious.

Pruning

We recommend the greatest care and moderation in this operation, believing, as we do, that upon the whole there is more injury done by the use of pruning instruments in unskillful hands than would result from its entire neglect. Some of the objects sought are to diminish the thick growth, to increase the vigor of the branches, to admit light and air, and to form a well-shaped top. We are opposed to the common practice of trimming trees as high as a man's head, leaving a long, naked stem, exposed to the ravages of insects and the deleterious effects of sun and wind, as well as other sudden and extreme changes of the atmosphere. If a tree be allowed to branch near the ground, its danger from these ills will be lessened, and it will grow much stronger and faster, bear more fruit, which will be more easily gathered, is less liable to be blown down, and, we may add, every way better. If watched closely when young and growing, it will never become necessary to take off large limbs. Occasional pinching or cropping off the ends of a branch to give the tree proper shape, and removing those that cross or crowd each other, will be all that will be needed by most trees. Peach trees would be greatly benefited by an annual shortening-in of the branches, say one-half of the previous year's growth; this may be done at any time after the fall of the leaf until the buds



The same shrub properly trimmed for planting.

Mulching

The value of mulching cannot be overestimated. It increases the fertility of the soil, protects the tree alike from drought and frost, and adds materially to the growth and vigor of young orchards. The trifling cost of material and labor, and the immense benefits derived, commend it to every one. Pine tags, straw, leaves, coarse manure, shavings or tan-bark may be used. Some of these may be produced by everyone.

Remove the mulching from the stems of the tree during the winter, otherwise mice may harbor there and injure it.

We also advise removing the mulch several times during the growing season and loosening up the soil about the trees.

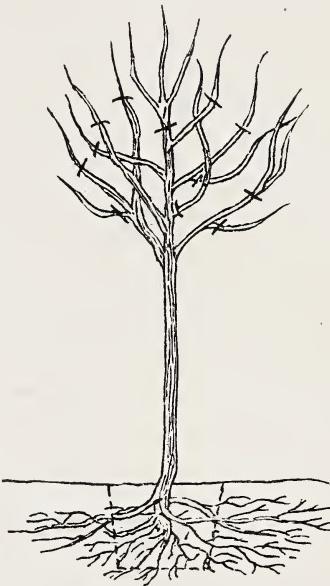
Cultivating

When the transplanting is finished, many persons are under the impression that their work is done, and they can do nothing more for the tree; but this is a very mistaken idea. It is an important matter to have them well planted, but doubly important to have them well cultivated afterwards. Enveloped in weeds and grass, what plant can flourish? What farmer, for an instant, would think of raising a crop of Indian corn in the thick and tall grass of a meadow? Such an idea, he would at once say, would be preposterous. We will say that it is no more impossible than the idea of raising a thrifty orchard under

commence swelling in the spring. If this is left to be done in the spring, be sure to do it not later than February. Dwarf Pears also need careful attention annually, to keep them in shape, by cutting back the rampant and straggling shoots; they should be pruned down instead of up, never allowing them to grow high; or the top will become too heavy for the roots, and increase the danger of blowing down.

How to Winter Trees Procured in the Fall

The practice of procuring supplies of trees in the fall is becoming more and more general as each season demonstrates its wisdom. It is a more favorable time than spring, because of the colder weather, and the lighter pressure of business with nurserymen, the freighting companies and the planter. Even when fall planting is not desirable, by reason of severity of the climate, the stock may be procured in the fall, and thus be on hand ready for the opportune moment in the spring. To insure success, you have only to get the trees before freezing weather and bury them in the following manner: Choose a dry spot where no water will stand during the winter, with no grass near it to invite mice. Dig a trench, throwing out enough dirt to admit one layer of roots below the surface, and place the trees in it, inclined to an angle of forty-five degrees or more. Widen the trench, throwing the soil among the roots in position, firming well by tramping with foot; place another layer in the trench, reclining the tops on the others, and so on until all are in the trench; then finish by throwing up more soil until the tops of the trees are nearly or quite covered. It is also well to bank up the earth around the sides to insure more thorough protection. The exposed tops should then be covered with pine boughs, which insures them against any possibility of injury. Care should be taken to fill solid all the interstices among the roots. In the spring the roots will be found to have formed the granulation necessary to the production of new spongioles, and, when planted at the proper time, will start to immediate growth.



The right way to prune a tree

Treatment of Trees Coming to Hand Out of Season

It sometimes happens that trees are received in a frosted state, but if they are properly managed they will not be injured by it. Let the package be put, unopened, in a cellar or some such place—cool, but free from frost—until it is perfectly thawed, when it can be unpacked, and either planted or placed in a trench until convenient to plant. Trees received in the fall for spring planting should at once be unpacked, and a trench dug in a rather dry, sheltered position, when the roots should be well covered. So treated, they will be preserved without the least injury until spring. If they should come to hand late in the spring, and appear much dried, plunge the bundle into a pool of water, there to remain for twenty-four hours or more, if very much wilted, after which it should be unpacked, and the roots and half the stems should be buried in soil made quite wet by watering; there let them remain until the bark expands to its natural fullness, when they may be taken up and planted as before directed, and we will guarantee you a good reward for your labor.

Plant Young Trees

We cannot too strongly recommend to our customers the procuring of young trees, especially for orchard planting, instead of selecting the largest that can be had, to secure a more immediate effect. They can be taken up with more perfect roots, and will become

sooner established in a new location. They can also be more readily trained to any desired shape. The largest and most successful planters invariably select young, thrifty trees, as the surest to give thorough satisfaction in the end, not only in vigor of growth, but in productiveness.

For small grounds, or street planting, when it is necessary to make a show as soon as possible, large trees are often desirable, and when handled with care should not fail to do well; but with the general planter the average of loss will be much less, and both time and money will be saved if young trees are selected to commence with.

DISTANCES FOR PLANTING

Standard Apples	30	feet apart each way
Standard Pears and strong-growing Cherries.....	20	" " "
Duke and Morello Cherries.....	18	" " "
Standard Plums, Apricots, Peaches, Nectarines.....	16 to 18	" " "
Dwarf Pears	10 to 12	" " "
Dwarf Apples	10 to 12	" " "
Grapes, rows 8 feet apart.....	8	feet in rows
Currants and Gooseberries	3 to 4	feet apart
Raspberries and Blackberries	3 to 4	feet by 5 to 7 feet apart
Strawberries, for field culture	1½ to 3½	feet by 3 to 4 feet apart
Strawberries, for garden culture	1	to 2 feet apart

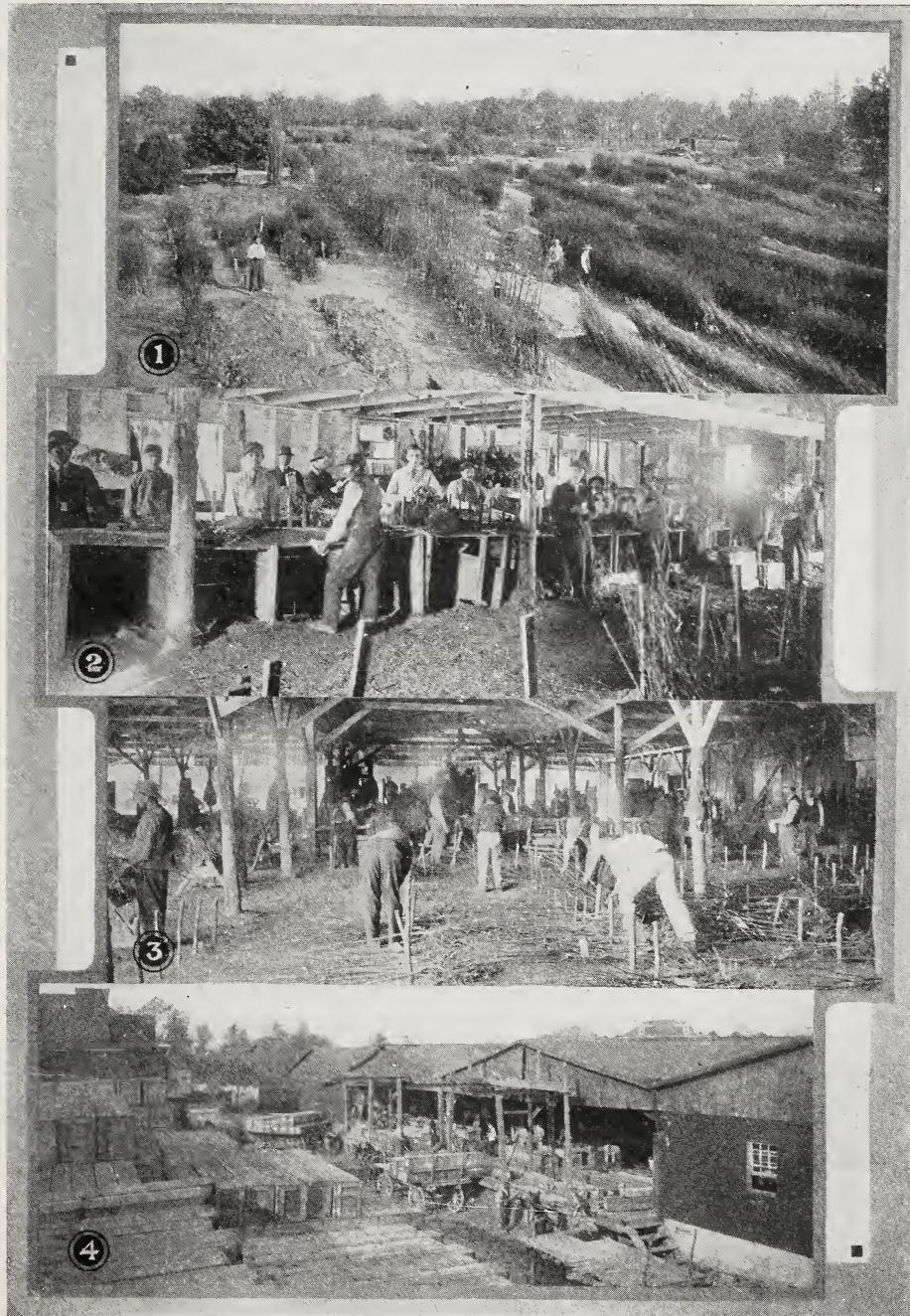
NUMBER OF TREES ON AN ACRE

30 feet apart each way.....	50	10 feet apart each way.....	435
25 " " " "	70	8 " " " "	680
20 " " " "	110	6 " " " "	1,210
18 " " " "	135	5 " " " "	1,745
15 " " " "	205	4 " " " "	2,725
12 " " " "	300	3 " " " "	4,840

RULE.—Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and the product will be the number of square feet for each plant or hill; which, divided into the number of feet in an acre (43,566), will give the number of plants or trees to the acre.



Planting by Line, Nursery Stock.



1. Packing Yard Scene, Showing Trees Heeled-in.

2. Packing Small Fruits, Roses, Ornamentals and Shrubs.

3. Packing House Scene.

4. Loading for Shipment.



Apple Orchard

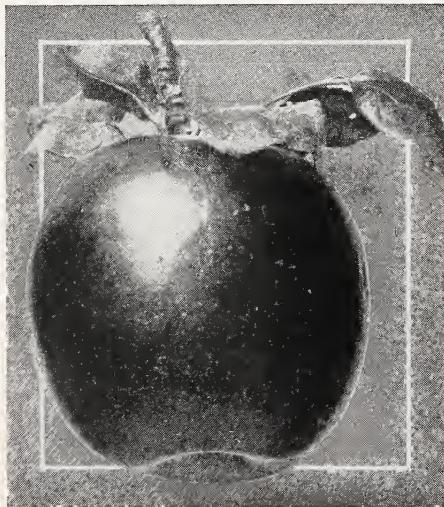
FRUIT DEPARTMENT

Since our last Catalog was issued we have taken several varieties from our lists as not proving worthy of cultivation, and others we have taken from our descriptive list, as we consider that it was too large; but we shall still continue to grow them in limited numbers, and if any of these varieties do well in any particular locality we shall be able to furnish them, but would advise confining your list to the descriptive kinds.

Select Apples

The first fruit, both in importance and general culture, is the Apple. Its period, unlike that of other fruits, extends nearly or quite through the year. By panting judicious selections of summer, autumn and winter sorts, a constant succession of this indispensable fruit for family use can easily be obtained.

As fruit has become cheaper on account of the increased supply, a large and constantly increasing European demand has sprung up, which affords highly remunerative prices for the best selected specimens of our orchards, while the new process of evaporation of fruit has become a recognized auxiliary to the horticulture of the land. With the immense consumption by this process of evaporation, it may be doubted if apple orcharding will ever in any season be less than highly remunerative. All the surplus of orchards, all "windfalls" and defective specimens, can at once be gathered and sold at a fair price to the evaporating establishments, which now exist in almost every town in all fruit-growing sections.



Carolina June

Summer Varieties

American Summer (American Summer Pearmain). Medium size oblong; nearly covered with streaks and dots of red; flesh tender, juicy, with rich subacid flavor, fine. Tree bears early and abundantly for several weeks. July and August.

Bough. (Sweet Bough). Large, roundish, sometimes conical; pale yellow; flesh white, very tender, with an excellent, sweet flavor. A splendid market and cooking Apple. Tree moderately vigorous and very productive. July.

Carolina June (Carolina Red June). An early bearer and very productive. Fruit medium size; dark crimson; flesh white, very tender, fine grained, juicy, subacid. June and July.

Summer Apples—Continued

Early Harvest. Rather round; yellow; flesh nearly white, tender, juicy, crisp, with a rich, sprightly, subacid flavor. Tree a moderate grower and very productive. It has no superior among early Apples. June and July.

Early Red. Fine size; beautiful, showy red. An immense and sure bearer. Ripens from middle to last of July.

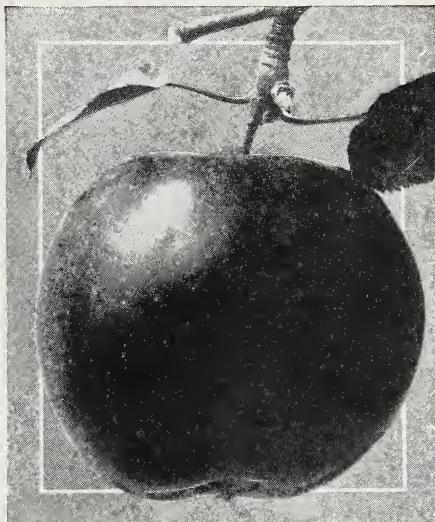
Early Ripe. Its large size, handsome appearance and good bearing qualities combine to make it the most profitable market variety of its season. The tree is hardy and of vigorous growth. Fruit large; yellowish white; flesh juicy; fine for the table or cooking. First of July.

Gravenstein. Large, roundish; striped with red; flesh tender, juicy, very rich, with subacid, high flavor; productive, handsome and excellent. Fine in all localities. August.

Golden Sweeting. Rather large; rich yellow; flesh juicy, tender, sweet. One of the best sweet Apples. Very popular variety. August.

Horse. Large; yellow; flesh coarse, subacid. Tree vigorous. Fine for cooking and for markets. Very popular in the South. August.

Jonathan of Eastern N. C. Large; white; subacid. Very popular. September.



Early Harvest

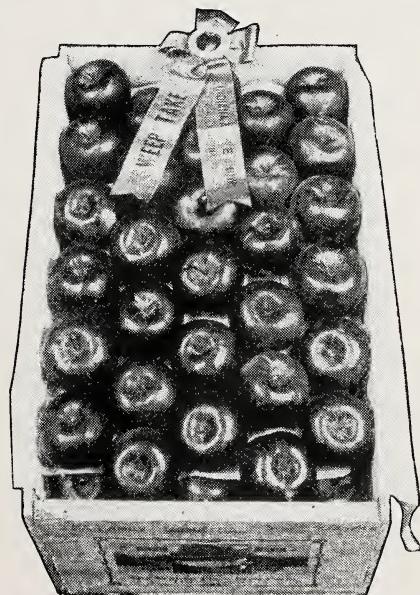
Maiden's Blush. Rather large, oblate, smooth and regular, with a fine, evenly shaded red cheek, or blush on a clear pale yellow ground; flesh white, tender, sprightly, with a pleasant, subacid flavor. Its handsome appearance and fine flavor make it one of the very best dessert Apples. August to October.

Oldenburg. A Russian variety of very handsome appearance and great value. Tree very hardy, vigorous, and an abundant bearer. Fruit medium to large; golden yellow, nearly covered with streaks of crimson; flesh tender, juicy, pleasant. An exceedingly valuable variety for the market. August.

Red Astrachan. Rather large, approaching conical; covered with deep crimson, overspread with a thick bloom; flesh juicy, rich, acid. From its earliness, handsome appearance, vigor of the tree and its excellent culinary qualities, it is worthy of general cultivation. July.

South Carolina Summer. Medium to large; bright red; flesh white, firm and crisp, very juicy, rich. This Apple is high-colored and as bright as if varnished, and we know of no other variety as showy at the same season. The surest bearer we know of, two-year-old trees having produced full crops in the nursery rows; when other varieties fail, the South Carolina Summer produces fruit. It ripens, where it originated, in Spartanburg County, S. C., from June 15 to the middle of August. Introduced by us.

Summer Rambo of Pennsylvania. Large to very large round, somewhat flattened;



Red Astrachan

Summer Apples—Continued

yellow and beautifully striped with red; flesh tender and rich, with a subacid flavor. August and September.

Yellow Transparent. It ripens fully ten days in advance of Early Harvest. Size medium; light, transparent lemon-yellow; smooth, waxen surface; flesh white, melting, juicy and of excellent quality. For an early Apple an exceptionally good keeper and shipper. Tree a free, upright grower, prolific, and a remarkably early bearer.

Autumn Apples

Bonum. Medium, oblate; color light to dark red; flesh yellow, firm, breaking, fine-grained; flavor rich, subacid; first quality for dessert; a most excellent Apple. Originated in North Carolina and deserves more general attention. September to December.

Buckingham, or Winter Queen. Large to very large; greenish yellow, mixed and striped with crimson or purplish red; flesh yellowish breaking, tender, juicy, mild, sprightly subacid. A handsome, healthy tree; come into bearing very early and is

very productive. We consider it one of the most valuable sorts. October to January.

Fallawater. Large, greenish yellow, with dull red cheek; slightly conical; juicy, subacid. Vigorous grower and very productive. Worthy of general cultivation. November to February.

Fall Cheese, or Fall Queen. Virginia Apple; very popular. Size large; green, beautifully striped with red; flesh white, subacid flavor and rich aroma. Tree a vigorous grower and very productive. September to December. Popular in Albemarle County, Va.

Fall Pippin. Very large, roundish oblong; yellow, rich and excellent. Tree vigorous and a fine bearer. Esteemed everywhere. In Virginia it is very popular as an early winter Apple. September to December.

Magnum (Summer or Small Fall Cheese). Medium, oblate; yellow, shaded and striped with red; flesh yellow, very tender, crisp, juicy, rich and aromatic; very fine. Tree prolific and a compact grower. Season late autumn.

Mother. Medium in size; beautifully covered with red, and somewhat striped; flesh rich and fine. A great favorite. One of the best of its season. Last of August and first of September.

Rebel. Large size, round; bright, clear red on yellow ground, covered with a fine bloom; flesh yellowish white, rich, with an agreeable mingling of the saccharine and acid. October to February.

Smokehouse. Fruit large, oblate; striped with red on yellow ground; flesh yellowish white, firm, juicy, crisp and rich, with a fine aromatic, subacid flavor; unsurpassed for culinary purposes; productive. September to December.

Wealthy. Fruit medium, oblate, whitish yellow ground, shaded with deep rich crimson in the sun; flesh white, fine grained, tender, juicy, lively, vinous subacid. We have fruited this variety for the past ten years, and we consider it one of the best for market and home use. Bears young and abundantly. September.

Delicious

Winter Apples

Albemarle Pippín. Fruit large, round, lop-sided, ribbed and irregular; surface smooth, yellowish green, sometimes bronzy, becoming yellow when ripe; flesh yellow, firm, brittle, juicy; acid, rich, agreeable. January to April.

Baldwín. An old Northern winter Apple. Large; red; flesh yellow and rich. No good in the South except in the mountains.

Ben Davis. Originated in Kentucky. Tree remarkably healthy, vigorous and an abundant bearer. Fruit large; handsome, striped; flesh whitish, tender, juicy, subacid. A very profitable market variety. Keeps till midwinter or later.

Berry Red. Medium to very large, oblate; dark, bright, shining red; flesh cream-color, quality good, flavor excellent and retained through its long keeping season, subacid, rich, juicy.

Black Ben Davis or Reagan. Tree almost identical in growth with Ben Davis but stronger, thriftier, and succeeding over even a larger territory. Fruit averages slightly larger than Ben Davis. Solid, rich, bright red; flesh firm, moderately juicy, more so than Ben Davis and slightly better in quality. A splendid keeper in cellar or cold storage; does not scald.

Delicious. A remarkable variety introduced in the West several years ago, where it is being largely planted and rapidly taking first rank both for commercial and home orchards. No new variety has ever so quickly gained popularity in so many different Apple sections of our country. Fruit large; nearly covered with brilliant, dark red; flesh fine grained, crisp and melting, juicy, with a delightful aroma; of very highest quality. A splendid keeper and shipper.

Gano. Tree very healthy, vigorous, very hardy; an early, annual and prolific bearer. Fruit bright red on yellow ground; large; flesh white, fine grained, mild subacid.

Grimes' Golden. Medium; rich golden yellow; crisp, tender, juicy, with a peculiar aroma. Good grower and early bearer; very popular. November to March. One of the highest class Apples grown.



Jonathan

Johnson's Fine Winter, or York Imperial. Medium size, truncated oval, angular; skin greenish yellow, nearly covered with bright red; flesh tender, crisp, juicy, aromatic; an enormous bearer and hangs well on the tree; a good keeper, retaining its flavor to the last. Splendid market variety. We cannot say too much in favor of this Apple. October to April.

Johnathan. Fruit medium or small, roundish; skin yellow, nearly covered with dark or lively red; fine grained, very tender and finely flavored. November to April. It and Grimes' Golden are classed as the two best dessert Apples.

Justice. This Apple, introduced by us, originated in Wayne County, W. Va., where it is prized as one of the best. Fruit very large; skin yellow, with heavy blush on sunny side, rather thick, smooth surface. It has a delicious flavor, subacid, and is known to keep until the following July.

King David. The most beautiful of all apples; resembles Jonathan, though larger; deeper, richer red, with distinct markings of darker red.

Kinnard's Choice. Fruit medium, rich, large, roundish oblate; skin yellow and covered with dark red or crimson; flesh yellow, fine-grained, tender, rich, juicy, almost aromatic, most excellent. No Apple grown is

Winter Apples—Continued

of better quality. Tree vigorous and bears young; is thought to be a seedling of Winesap and is worthy of such parentage.

Lankford's Seedling. Tree hardy and bearing annual crops. Fruit of large size; striped; quality excellent; keeps until April.

Limbertwig. An old Southern Apple; medium size; dull red; subacid and of rich flavor; good grower, bearer, and keeper. January to April.

Lowry or Mosby's Best. This is a native of Piedmont, Va. Beautiful red on yellow ground; flavor nearly sweet, very slightly acid, delicious. Will ship well and sell at a fancy price as a dessert Apple in any market. The tree is a rapid grower, healthy and vigorous; comes into bearing very young, and has no off years.

Mammoth Black Twig, or Paragon. Tree very vigorous, hardy, productive; roots much stronger than Winesap; has larger leaves and twigs a shade darker. Fruit about the same color as Winesap but larger; flavor fully equal to Winesap; believed to be a better keeper.

McIntosh Red. Large; skin yellow, nearly covered with bright red; flesh white, tender and juicy. Tree very hardy. November to February.

Morgan's Christmas. Medium to large, somewhat flattened at the ends; color rather peculiar, at the stem being dark red or black, which fades to yellow below the center to blossom end; but its crowning excellence is its flavor. We have never eaten any other Apple to equal it in its season. December to March.



Three-year apple tree in orchard

Northery Spy. Large, conical, flattened; striped and quite covered on the sunny side with dark crimson, and delicately coated with bloom; flesh white, fine-grained, tender, slightly subacid. Both leaf and blossom buds open a week later than most other sorts. November to February.

Northwestern Greening. Has stood the most trying tests and is found to be equal to Wealthy in point of hardness, but superior in fruit and keeping qualities. Large, smooth; greenish yellow; flesh fine grained, juicy, firm, good quality. Thoroughly tested. January to April.

Opalescent. The handsomest Apple on the market. An annual bearer of beautiful, high-quality fruit. Large; light, shading to very dark crimson, and susceptible of a very high polish, hence its name. December to March.

Paradise Winter Sweet. Large, regularly formed, roundish; skin fair and smooth, dull green when picked, with a brownish blush; flesh white, fine grained; juicy, sweet, sprightly and very good; productive; an excellent Apple, well worthy a place in the orchard. Fine for market. November to February.

Roberson. Size large, roundish, slightly oblong; rich yellow, covered with red, and shaded with deep red; flesh yellowish, crisp, juicy and well flavored; slightly subacid. Tree a vigorous grower and abundant bearer. January 1 to June.

Rome Beauty. Large; yellow, striped and mixed with light red; flesh yellow, breaking coarse-grained, subacid; valuable for market on account of its productiveness, size and beauty, as well as for its certain bearing. November to January.

Roxbury Russet. Rather above medium size, roundish, oblate, remotely conical; skin covered with russet; flesh greenish white, rather granular, slightly crisp, with a good subacid flavor. November to January.

Royal Limbertwig. Very large; pale yellow, blushed or striped with red; flesh juicy, rich and very good. Tree a thrifty grower and bears well. December to March.

Shockley. Fruit medium size; yellow, with crimson cheek; flesh subacid, nearly sweet. Tree erect, vigorous grower; comes into bearing early and is exceedingly productive. This is probably the most reliable and valuable winter variety for the South, and justly very popular. Maryland. Keeps till May or June.

Stayman's Winesap. It has large size, bright red color, great productiveness and best quality to commend it. The tree is a vigorous grower, and is irregular and droop-

Winter Apples—Continued

ing in habit, adapting itself readily to different soils and situations.

Virginia Beauty. Medium to large; very dark red; subacid. Very valuable on account of its fine keeping qualities. We have been growing this variety for more than twenty-five years for the Southwest Virginia trade, but think it should be planted more freely in other sections. November to March.

Winesap. Fruit medium size, rather oblong; skin smooth, of a fine, dark red, with a few streaks and a little yellow ground appearing on the shady side; flesh yellow, firm, crisp, with a rich, high flavor. November to March.

Wolf River. Very large and handsome; flesh whitish, juicy, subacid; a good bearer and a long keeper.

Yates. A Georgia variety of small size; dark red with white dots; flesh firm, juicy, aromatic; immense bearer.

Crab Apple

The Crab Apple is valuable for preserving, jellies, cooking and cider, and some varieties are also desirable for table use. They are often planted for ornamental trees, being covered in spring with lovely fragrant blossoms, while in the summer and fall the fruit

makes a handsome appearance on the tree. They will flourish in almost any soil and climate, coming into bearing very early, and are very productive. Crab Apples always bring good prices in market. We give below the most valuable sorts:

Hyslop. Fruit large for its class, produced in clusters; dark rich red, covered with a thick blue bloom. Good for culinary uses and for cider.

Transcendent. Fruit large for its class; golden yellow, with a beautiful rich crimson cheek; when ripe the red or crimson nearly covers the fruit; flesh creamy yellow, crisp, subacid, pleasant and agreeable. Tree a rapid grower and productive. September.

Yellow Siberian. Large, and of a beautiful golden yellow color. Tree vigorous. September.

Dwarf Apple**Summer**

American Summer Pearmain.

Car. Red June. Summer Rambo.

Early Harvest. Yellow Transparent.
Gravenstein.

Fall

Bonum. Fall Pippin. Grimes' Golden.

Winter

Delicious. Staymans.



Block of 1-year Apples

Select Pears

The cultivation of this noble fruit is extending as its value is appreciated. The range of varieties is such that, like apples, Pears can be had in good eating condition from July until early spring.

The melting, juicy texture, the refined flavor and the delicate aroma of the Pear give it rank above all other fruits, except the grape.

But the Pear, like most things highly desirable and valuable, cannot be had without attention, labor and skill. The relative price of the Apple and the Pear being about as one to ten, shows at the same time the superior value of the latter and the greater skill required to bring it to perfection.

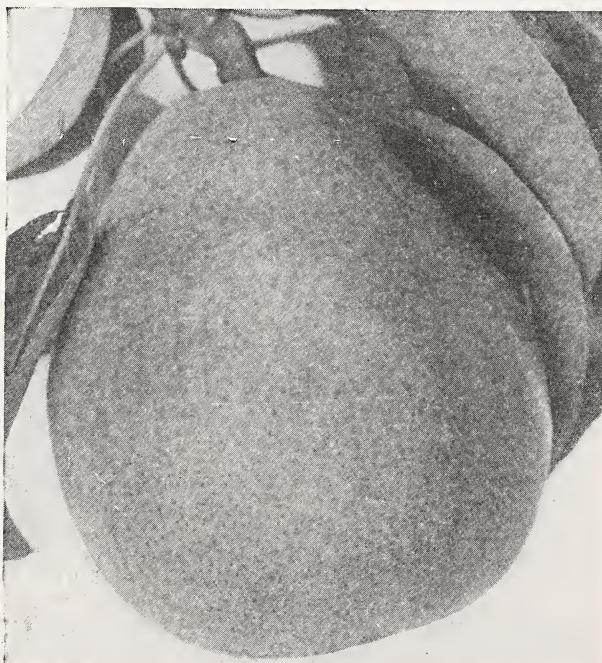
One of the most important points in the management of Pears is to gather them at the proper time.

Summer Pears should be gathered at least ten days before they are ripe, and autumn Pears at least a fortnight. Winter varieties, if they will hang so long, may be left until the leaves begin to fall.

At the present time the demand is for choice fruit; inferior fruit brings scarcely a remunerative price, but the best will always pay well. Pears should have the best kind of cultivation; the fruit should be thinned so as not to over-produce. Care should be used in selecting for market only the best specimens, and with such effort and system on the part of the grower there will always come a satisfactory profit.

The Pear succeeds on most soils, but does best on a rather heavy loam. Budded on its own stock it makes a standard tree, and on the French or Angers quince a dwarf; the former being best adapted to large, permanent orchards; the latter (requiring garden culture and severe pruning every year) to smaller orchards, fruit-yards and gardens.

Dwarfs must always be planted sufficiently deep to cover the junction of the Pear and quince—two or three inches,—the soil made rich and well tilled, and about one-half of the previous summer's growth cut off each spring. Under this treatment dwarfs are everywhere successful. The side branches should not be removed higher than one foot from the ground in Dwarfs, while Standards may be trimmed to the height desired. Train in pyramidal form. Ripen the fruit in the house. Gather when, on gently lifting the fruit, the stem will readily separate from the limb. Place in a dark room until fully matured. Winter Pears may hang on the trees until there is danger from frost, then place in a dry cellar for maturing.



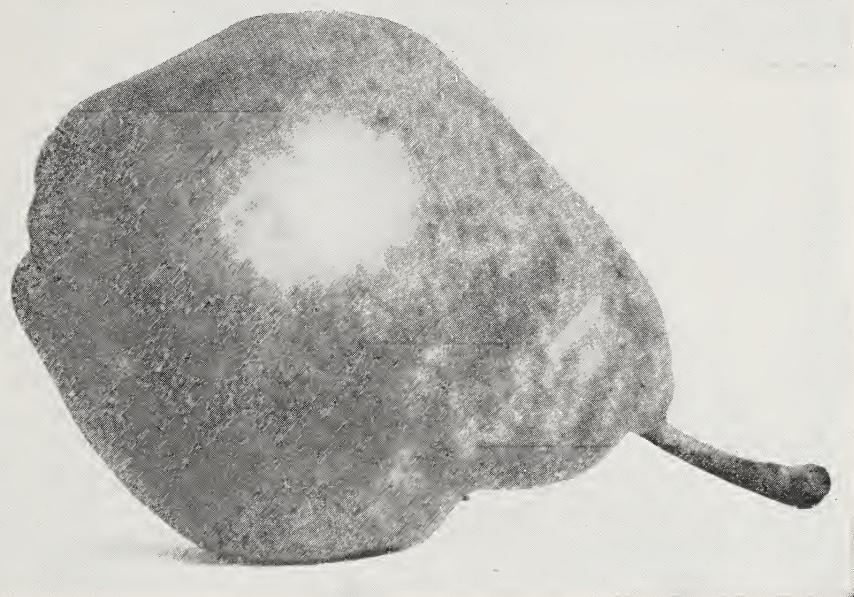
Bartlett Pear

The side branches should not be removed higher than one foot from the ground in Dwarfs, while Standards may be trimmed to the height desired. Train in pyramidal form. Ripen the fruit in the house. Gather when, on gently lifting the fruit, the stem will readily separate from the limb. Place in a dark room until fully matured. Winter Pears may hang on the trees until there is danger from frost, then place in a dry cellar for maturing.

Early Pears

Bartlett. Large; yellow, with a soft blush on the sunny side; flesh white, exceedingly fine grained and buttery, sweet, very juicy, with a highly perfumed, vinous flavor. Tree bears early and well. July and August.

Boykin's June. Below medium size; yellow with a reddish brown cheek; flesh white, sweet, not of high flavor, but



Clapp's Favorite Pear

Early Pears—Continued

its earliness and handsome appearance make it a desirable market variety. Season first to middle of July.

Clapp's Favorite. Resembles the Bartlett in appearance, but ripens a week or ten days earlier; one of the best native sorts; fruit large; skin smooth, yellowish-green, becoming yellow, dotted and shaded with red next the sun; flesh yellowish-white, juicy and melting; of very good quality.. Last of July.

Comet, or Lawson. The tree is a vigorous grower and very productive. Fruit above medium size and of most beautiful crimson color on yellow ground; flesh crisp and pleasant, though not of best quality. Ripens early in July.

Early Harvest. Tree is a very thrifty grower and good bearer. The earliest of the large pears; a month earlier than Clapp's or Bartlett. Fruit not especially good.

Koonce. Tree a vigorous grower and a heavy and annual bearer. One of the earliest pears of any size. From samples received we do not class it as first quality, but its size and handsome appearance will make it sell as an early market pear.

Le Conte. Fruit large, pyriform; skin smooth. Tree of remarkable vigor and rapid growth; foliage luxuriant; has so far been

nearly free from blight. Quality variable; ripens a few days before Bartlett. Grown only as a standard.

Summer Doyenne (Doyenne d'Ete). Small, flesh white, melting, juicy, with a pleasant, sweet flavor; one of the very best early pears. Tree a good grower and productive. First to middle of July.

Wilder. Ripens about with Summer Doyenne; of superior quality; does not rot at the core; of handsome appearance. Tree extremely vigorous.

Summer and Autumn Pears

Angouleme (Duchess d'Angouleme). Very large; dull greenish yellow, streaked and spotted, with russet; flesh white, buttery and very juicy, with a rich and very excellent flavor. The large size and fine appearance of this fruit make it a general favorite. Should be planted as a dwarf. September to November.

Anjou (Beurre d'Anjou). Large; greenish, sprinkled with russet, sometimes shaded with dull crimson; flesh whitish, buttery, melting, with a high, rich, vinous, excellent flavor. Very productive. September to November.

Brignais. (Beurre de Brignais; Des Nonnes). This very excellent pear is of medium size; smooth, greenish, with numer-



Seckel Pear

Summer and Autumn Pears—Continued
ous gray dots; flesh white, very juicy, sweet, melting and delicious; early. August and September.

Flemish Beauty. Large; skin pale yellow, but mostly covered with marblings and patches of light russet, becoming reddish brown on the sunny side at maturity; flesh yellowish white, not fine grained, but juicy, meting, saccharine and rich. The tree is hardy and bears early and abundantly. September.

Garber's Hybrid. Tree an upright grower, with heavy, dark green, glittering foliage, which is nearly or quite free from blight; fruit as yellow as an orange; larger than Kieffer, better in quality and four weeks earlier. September. Origin, Pennsylvania.

Japan Golden Russett. The tree is a luxuriant grower, with an abundance of thick, tough, leathery foliage, enabling it to endure great heat and drought without injury. It is an extremely early bearer, and bears enormously every year. Ripens in September.

Seckel. Small; skin brownish green at first, becoming dull yellowish brown, with a lively russet-red cheek; flesh whitish, buttery, very juicy and melting with a peculiarly rich, spicy flavor and aroma. August and September.

Sheldon. Medium size; yellowish or greenish russet, with a richly shaded cheek; flesh a little coarser, melting, juicy, with a very brisk, vinous, highly perfumed flavor; productive. October.

Worden-Seckel. A seedling of the Seckel, equally as good in flavor and quality, but far superior in size, color and beauty. It is an upright grower, abundant bearer, and ripens a little later than Seckel.

Winter Pears

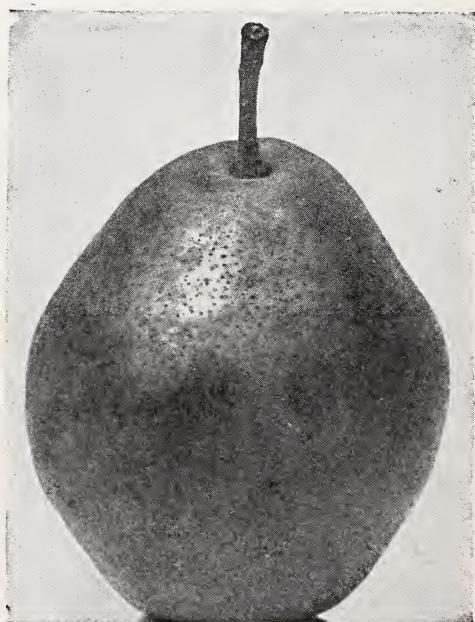
Dewey's Premium. A large, fine and showy fruit. November to January.

Kieffer. Tree a very vigorous grower and an early and abundant bearer. Fruit medium to large; skin yellow, with a bright vermilion cheek; flesh brittle, very juicy; of good quality. Valuable for market or family use; succeeds best as a standard.

Lawrence. Rather large; yellow, covered with brown dots; flesh whitish, slightly granular, somewhat buttery, with a very rich aromatic flavor; unsurpassed among the early winter pears. Tree healthy, hardy and productive. November and December.

Dwarf Pears

The pear, budded on the root of the quince as a stock, assumes a dwarf habit, and seldom grows above ten feet in height, when properly trained. For this reason the dwarf pear is specially recommended for small



Kieffer Pear

Dwarf Pears—Continued

gardens. It comes into bearing quicker than the standard sorts, and a few trees in the back yard will produce an abundance of fine fruit.

In planting put them deep enough so that the earth will come about two inches below the bud or graft. If planted too deep, they might take root above the bud and thus turn back into a standard tree. About one-half of the previous summer's growth should be cut off each spring. The side branches should not be removed higher than one foot from the ground on dwarfs, while on standards they may be trimmed to three or four feet. Train in pyramidal form. Ripen the fruit in the house. Gather, when on gently lifting the fruit, the stem will readily separate from the limb. Place in a dark room until fully matured. Winter pears may hang on the tree until there is danger from severe frosts.

Dwarf Pears

Summer Doyenne
Brignais
Angouleme

Seckel
Anjou
Lawrence

In all lists of Dwarf Pears we advise that one-half shall be Angouleme.



Angouleme Pear



Digging Trees with Tree Plow.



Arp Beauty Peaches

Select Peaches

The ease with which Peach trees may be cultivated, their comparative freedom from disease, the short period before they become productive, with the immense demand for the fruit and the facility with which it may be shipped to distant markets, make Peach-growing extremely profitable.

We have the climate and opportunities to develop this fruit to the highest standard of excellence, and it should be a source of gratification to all that within the last few years so many valuable new varieties of merit have been introduced.

Owing to the greatly increased demand for the Peach, due to the development of the canning and evaporating interests, this fruit will no doubt continue to be exceedingly profitable to the orchardist who gives the business proper attention and has a suitable location for his orchard.

The grower in the Southern States who has transportation facilities to market his fruit in the Northern markets, we would advise to plant largely of the earliest varieties; they mature and can be marketed in New York before the fruit of Delaware and Maryland is ripe. In the New York market the early Southern Peaches always command the highest prices. Those situated beyond the reach of convenient transportation, should, after providing for their local markets, plant the best sorts for canning and evaporating purposes, as these have now become very important and profitable industries.

There is no fruit tree that makes so quick a return as the Peach. Give it reasonable attention, and in three years from planting a fair crop may be gathered; and the receipts from a good orchard are something of importance, there now being many Peach-growers who realize from \$10,000 to \$20,000 from that crop in favorable seasons, and yet they do not have the advantage of the high prices that may be obtained by the Southern orchardist for his earlier crop, brought into the market before the competition which meets the Maryland and Delaware grower.

Our purpose is to grow the best trees—not the lowest-priced ones. Great care is necessary to preserve the health of the young tree before it is taken to the orchard. We, therefore, are careful to select the best seed, to use buds from healthy trees only, and we are confident that every tree will be true to name and just as represented by the most fastidious lover of this fruit, not only in a succession, but in a variety of sorts for all seasons.

Peaches—Continued

Admiral Dewey. Fruit good size; flesh yellow; free. July 15th.

Alexander. Fruit medium to large; bright color and of good quality. One of the favorite early market varieties.

Arp Beauty. Originated in Texas. We fruited it for the first time this year and were well pleased with it. Valuable for home orchard and market. Fruit medium to large; flesh yellow; quality best of its season. Nearly free.

Belle of Georgia. Very large; skin white, with red cheek; flesh white, firm and of excellent flavor. The fruit is uniform in size and showy. Tree a rapid grower and very prolific. Ripe August 1 to 15.

Bilyeu's Late. Ripens after Smock Free and Salway; fruit of large size; white, with a beautiful blush cheek; flesh white.

Brackett. Introduced by P. J. Berckmans Co., Augusta, Ga., and named by them in honor of the late Col. G. B. Brackett, pomologist, U. S. Dept. Agriculture. Its period of ripening is about the time of the Elberta. The fruit is a perfect freestone, large to very large, oblong. Color, orange yellow, washed red and mottled deep carmine with dark carmine cheek. Flesh, deep yellow, juicy, highly flavored and best qualities. Stands shipping well, and we recommend its trial by all planters. We fruited it on three-year-old trees at our orchard in Albemarle Co., Va., the past summer and think highly of the variety. Aug. 15 to 25.

Burke. Very large, roundish oblong; skin pale cream color, slightly shaded on sunny side with red; flesh white, juicy, melting, sweet and vinous, making one of the largest, best and most showy clingstone peaches. Aug. 10 to 20.

Butler's Late. This magnificent new freestone peach originated in the garden of J. T. Butler, Richmond, Va. Fruit of the very largest size; skin greenish white, with red cheek; flesh white, firm and of very good flavor; tree vigorous and very productive. September 15 to October 1.

Carman. A large, roundish peach with a pale yellow skin, red blush on sunny side; white flesh, tender and melting, rich, sweet. One of our best early market peaches. A big, early, yellow skinned peach of high quality; is sure to be in great demand. Don't miss the Carman. Ripens in Albemarle County, Va., July 10 to 20.

Chinese Cling. Fruit large, roundish oval; skin transparent cream color, with marbling of red next to the sun; flesh creamy white,

very juicy and melting, with a rich, agreeable flavor. August 1st.

Chinese Free (China Strain). Large, oblong; skin white, with red cheek; flesh red, firm and well flavored; free from rot, which makes it a very desirable market variety. Ripens August 10 to 15.

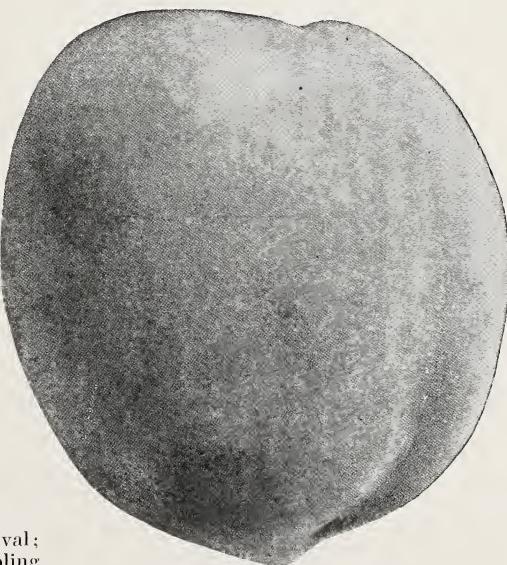
Chair's Choice. Fruit of very large size; yellow, with a red cheek; flesh yellow, firm and of good quality; tree a strong grower and a good bearer. Ripens Aug. 15th to Sept. 1st.

Champion. Remarkable for size and good quality; skin is of a rich, creamy white, with a red cheek; exceedingly handsome; flesh creamy white, firm, sweet and delicious, rich and juicy; a perfect freestone. Ripens July 25 to August 10.

Crawford's Early. A magnificent, large, yellow peach of good quality. Its size and beauty make it one of the most popular orchard varieties. First of August.

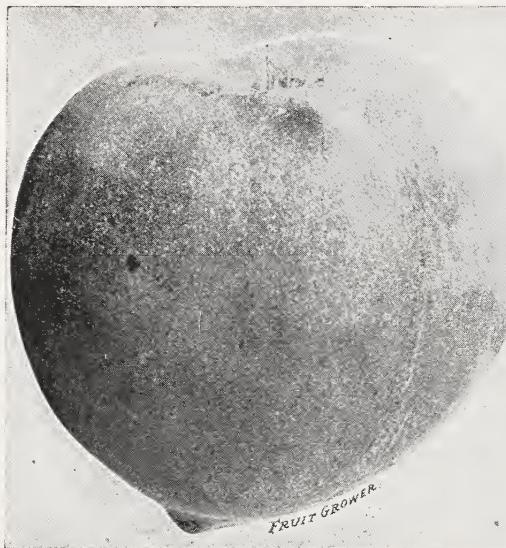
Crawford's Late. Very large, roundish; skin yellow, with a beautiful dark red cheek; flesh rich, yellow, melting, with sweet luscious flavor. Worthy of universal cultivation as table and market sort. Middle of August. One of the finest late sorts.

Early Wheeler, or Red Bird Cling. Earliness, glorious color and splendid quality make it the greatest of the very early peaches. Creamy white, overspread with bright glowing red; large size, of exquisite beauty and of excellent quality. June 5 to 15.



Champion Peach

Peaches—Continued



Greensboro Peach

Elberta. An exceedingly large, high colored yellow peach, a cross between Crawford's and Chinese Cling; juicy, well flavored; said to be probably the finest yellow freestone in existence. Ripens early in Aug.

Emma. Fruit very large; skin golden yellow, with red cheek; flesh yellow, fine-grained, firm, juicy and highly flavored; tree luxuriant grower and quite prolific. A perfect freestone; one of our most attractive and profitable market varieties. Ripe July 25 to August 5.

Fitzgerald. An improved Crawford's Early, being fully equal to it in size, quality and color. Fruit large; bright yellow suffused with red; flesh deep yellow. August.

Foster. A new, very large peach, resembling Crawford's Early in appearance, but larger and somewhat earlier. Tree hardy and productive. August.

Fox Seedling. Large; white, with whole side red; melting, sweet, high quality and high flavor. Good for home use, market and canning. Trees bear very regularly. Free. September 1 to 15.

Globe. An improvement upon Crawford's Late; vigorous and productive; fruit large, globular; of a rich golden yellow, with red blush; juicy, yellow. Aug. 20 to Sept. 1.

Greensboro. A peach as large as common July peaches, and beautifully colored; a freestone, ripening with Alexander. The flesh is white, very juicy, and of excellent quality. One of the best early peaches. June 20.

J. H. Hale. The fruit as we have seen it is: Color a deep yellow over-spread with carmine, except on the under side; the skin is smooth without much fuzz; flesh yellow, firm, fine-grained and unusually solid, parts freely from the stone; flavor is most delicious, much better than yellow peaches usually run. It ripens several days before Elberta.

Heath Cling (White Heath or White English). Fruit very large; skin pale, yellowish white with a faint blush or tinge of red in the sun; flesh greenish white, very tender and melting; exceedingly juicy, with a sweet, rich, high and luscious flavor. Tree hardy and vigorous. September 1 to 15.

Hiley (Early Belle). A seedling of Belle of Georgia, but ten days earlier. Rich, creamy white, with fine blush; firm; excellent quality. Free. This is a commercial variety. July 25 to August 10.

Jackson, or Red July. Origin, Richmond, Va. One of the largest early freestones; skin a beautiful, rich red; flesh white, very juicy, and separating entirely from the seed. Ripens after Alexander.

Klondike. Large; white and red; juicy; solid. Free. August 1 to 15.

Large Early York. The tree is vigorous and productive; fruit dotted with red in the shade, deep red cheek to the sun; flesh nearly white, fine grained, very juicy, with a mild, excellent flavor. July 25.

Large Red Rarereipe. A most excellent Peach, ripening early in August. Fruit large; skin greenish white, dotted and with a beautiful rich, red cheek; flesh white, red at stone, melting and juicy, with sweet, rich flavor. One of our best. Aug. 1 to 15.

Lemon Cling. A very large and beautiful lemon-shaped variety; light yellow, reddened in the sun; flesh firm, yellow, rich, with a vinous, subacid flavor; fine for preserving; tree very hardy and productive. Last of August.

Late Elberta. Identical with Elberta in size, color, shape and quality, but ripens later. A great market Peach, a good shipper, and always commands top prices. Should be planted to lengthen the Elberta season, along with the greatest of all yellow Peaches.

Lemon Free. The name is very appropriate, as it is almost of lemon-shape, being longer than broad, pointed at the apex; color a pale yellow when ripe. Large size, finest specimens measuring over 12 inches in circumference; excellent quality. Ripens after Crawford's Late. Productive.

Peaches—Continued

Levey's Late (Henrietta). Fruit large, roundish; skin deep yellow; a shade of rich, brownish red in the sun; flesh deep yellow, rather firm, juicy, half-melting, sweet; very good and a valuable variety on account of its late season. First to 15th of September.

Lorentz. A yellow-fleshed freestone, and its handsome appearance has been a surprise to all who have seen it. Does not crack, is very firm, keeps well, and is a fine shipper. August 20 to September 1.

Mayflower. The earliest Peach—earliest to ripen and the earliest to bear; the latest to bloom; red all over; medium to large, slightly oblong and pointed; juicy and good. It sets too much fruit and in order to keep it from overbearing, and to have large fruit, it is very necessary to thin this variety. Splendid for the early markets where it always commands good prices. June 1st to 15th.

Mathews' Beauty. A large, yellow Peach of the Smock strain, but of good quality; very showy and a valuable shipper. August 15th to 25th.

Mountaín Rose. Fruit large, roundish; skin whitish, nearly covered with light and dark, rich red; flesh white, slightly stained at the stone, juicy, sweet; separates freely from the stone. Ripens August 10th to 20th.

Niagara. Originated in Niagara County, N. Y. Similar to Elberta and better in quality, ripening a little later. Tree hardy and healthy and has resisted all attacks of leaf curl and other diseases.

Oldmixon Clingstone. Large, yellowish white, dotted with red on a red cheek; flesh pale white, very melting and juicy, with an exceedingly rich, luscious flavor; one of the most desirable clingstones. Middle of August.

Oldmixon Freestone. Is a fine, large, productive variety, succeeding well in all localities and well deserving of the high favor in which it is held as an orchard variety; skin yellowish white, with a deep red cheek; flesh white, but red at the stone; tender, rich, excellent, indispensable. Middle of August.

Pendleton. A yellow Peach. Color rich, deep yellow, slight-

ly tinged with red; flesh yellow, tender, juicy, with a delicious flavor. Ripens at Richmond, Va., Sept. 1st to 15th.

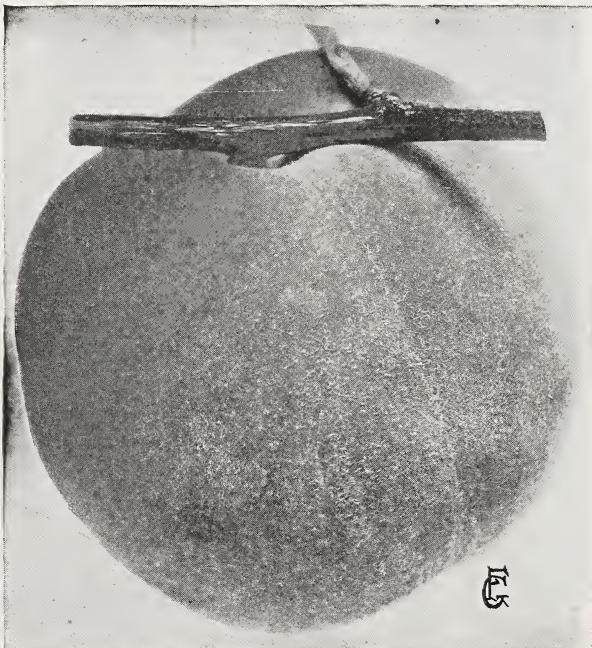
Picquet's Late. Fruit large and handsome; skin yellow, with a red cheek; flesh yellow, melting, sweet, and of highest flavor. Ripens about with Smock Free.

Ray. White with red blush; flesh white, firm, meaty, highly flavored; most excellent shipper and always attracts attention in market. August.

Reeves' Favorite. Fruit large, roundish, with a fine red cheek; flesh deep yellow, red at stone; juicy, melting, with a good vinous flavor. One of the largest and handsomest Peaches; should be in every orchard. A splendid Peach for fancy trade. August 20th to 30th.

Salway. A large, late, yellow freestone of English origin; handsomely mottled, with a brownish red cheek; flesh deep yellow, juicy, melting, rich; very productive; a variety growing more and more in favor, and invariably brings top prices in the Northern markets. September 15 to October 1.

Smock Free. Rather large; yellow, with red cheek; flesh yellow, red at the stone; very productive; not of high excellence, but valuable as a market variety. It succeeds



Salway Peach



Peach Orchard

Peaches—Continued

well in Eastern Virginia, but west of the ridge is not so valuable. September 15 to October 1

Sneed, or Peebles. Peach medium to large; straw-color, with red cheek; has matured its fruit where Alexander rotted on

the same soil. Very hardy and seldom fails. Not as early as Mayflower. June 1 to 15.

Stevens' Rareripe. Large, oblong; white, nearly covered with red, very highly colored and beautiful; heavy bearer and particularly free from disease; freestone. Last of September.

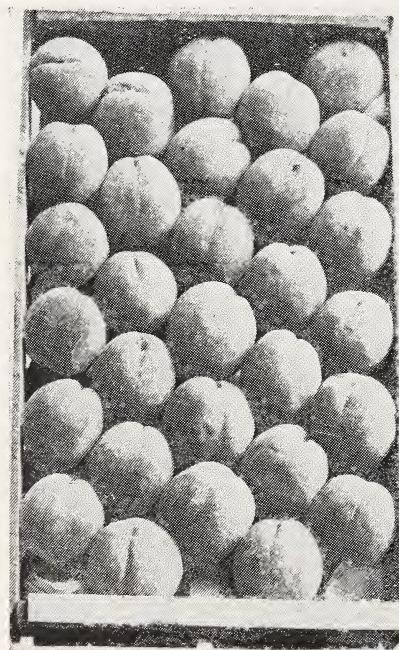
Stinson's October. Cling. Large; white with red cheek; of very good flavor. The best very late Peach. The most profitable late peach yet introduced for Southern markets. October 1 to 15.

Stump the World. Large; creamy white, with a bright red cheek; flesh white, juicy and high flavored; productive; one of the best market varieties. An old standby which is still very popular. Ripens middle of August.

Tennessee Everbearing. W. T. Nichols, of Obion County, says of this variety: "The parent tree is said to have produced its first crop about 1888. The tree ripens fruit continuously from about August 1 to October 1. Skin creamy white, with a deep blush in the sun; clingstone."

Thurber. Large; skin white, with light crimson mottlings; flesh very juicy, of exceedingly fine texture. A seedling of Chinese Cling, which it resembles in size and beauty, but perfectly free. A sure bearer.

Troth's Early. A very early and excellent Peach of medium size; whitish, with a fine red cheek; flesh juicy, sweet and very good; one of the most popular and profitable varieties for early marketing. Middle of July.



Pack of Mayflower Peaches

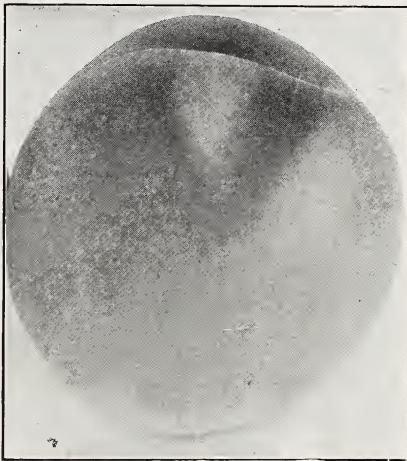
Peaches—Continued

Victor. Fruit is of medium size, light pink, with deeper shade next to the sun. Ripens thoroughly to the seed, and is of excellent flavor. Semicling. Ripe June 5 to 20. A vigorous grower, early and prolific bearer.

Waddell. Fruit medium to large; creamy white, red cheek; firm; white, rich and sweet. Free. A good commercial variety. July 1 to 15.

Wheatland. An extensive fruit-grower says: "It is the largest, hardiest, best, most productive and handsomest of its season—filling a gap just before Crawford's Late, which it excels. Though crowded on the tree, the fruit was all large." The fruit is very attractive in color, with a beautiful red cheek; flesh yellow, firm and deliciously sweet. An extra good freestone.

Wonderful. Originated in New Jersey. Large to very large, best specimens from crowded trees measuring 11 inches in circumference and weighing as many ounces; smooth, almost globular; very regular and uniform in size and shape; color rich golden yellow; flesh yellow, high-flavored, firm; very free. Ripens in September.



Wonderful Peach

Yellow St. John, or Fleitas. A large, roundish, yellow freestone. Skin orange-yellow, with a deep red cheek; flesh yellow, juicy, sweet and high-flavored. A favorite of all who grow it. August 10 to 20.



Block of Budded Peach Seedlings. These trees by the hundreds of thousands.

Select Plums

The Plum will grow vigorously in almost every part of this country, but it bears its finest and most abundant crops in heavy loams, or where there is considerable clay; it will bloom and set a fine crop in a sandy soil, but in such soils it generally falls a prey to the curculio, and drops prematurely. There are, however, some varieties that succeed very well in such situations.

The curculio, a small, brown insect, commences its depredations on this fruit as soon as it has attained the size of a pea, and continues its course of destruction until the crop is matured. It makes a small, crescent-shaped incision in the fruit, and lays its egg in the opening; the egg hatches into a worm, which feeds upon the fruit, causing it to fall prematurely. The only preventive that is known to succeed with any degree of certainty is to place a white sheet under the tree early in the morning, when cool, and by jarring the tree suddenly the insect falls upon the cloth, and, being stiff, can easily be caught. By commencing this as soon as the fruit is formed, and continuing it daily for about three weeks, you may be able to save a good crop. Exemption may not be secured from black fungus or knot, but if branches affected are carefully removed and burned, the wounds caused by removal of branches are well saturated with kerosene oil, and the trees are given careful cultivation, the injury to the trees will not be great.

European and Native Plums

Bradshaw. Large, dark red, flesh green, juicy, productive, fine for market. August.

German Prune. A valuable Plum of fair quality for the table, but most esteemed for drying and preserving; fruit long and oval; skin purple, with a thick blue bloom; flesh firm, green, sweet and pleasant; separates from the stone. Tree is strong, vigorous and prolific.

Lombard. Medium size; skin delicate violet, dotted thick red; flesh deep yellow, juicy, and pleasant; one of the hardiest, most productive and valuable Plums. Succeeds well everywhere, even on light soil. August.

Réine Claude de Bavay (Green Gage). Large; greenish yellow, spotted with red;

flesh rather firm, juicy, sugary, rich, of fine quality; adheres slightly to the stone; a vigorous grower, very productive, and a valuable addition to the late varieties. September.

Red Damson. This is a valuable fruit, ripening later than Shropshire Damson. For jelly and preserves it has no superior among Damsons. It comes into bearing the second year after transplanting, and bears annually heavy crops. The tree is a strong, robust grower, making quite a large tree. When in bloom it is one mass of white flowers, without a leaf; later it is clothed with broad, dark green foliage. It is really a beautiful tree, free from black knot or any other disease. A certain bearer.



Lombard Plum

European and Native Plums—Continued

Shropshire Damson. An improvement on the common Damson, being of the largest size of its class; dark purple; highly esteemed for preserving; tree vigorous and enormously productive. September.

Wild Goose. Medium size; oblong; bright vermillion-red; juicy, sweet and good quality; cling; productive, and nearly proof against the curculio. The most profitable variety for market in South, and deserves more extensive planting there as well as in the Middle States. July.

Yellow Egg. A very popular fruit on account of its very large size and splendid appearance; its slight acidity renders it valuable for preserving; skin yellowish, covered with a white bloom; flesh yellow, adhering closely to the stone; rather acid until it becomes very ripe. Last of July.

Japan Plums

This class of fruit is attracting the attention of all fruit-growers, and is remarkable for its beauty, size and productiveness and early bearing. The trees often bear at two years in the nursery row, and we think this fruit will supersede the European varieties here and further South.

Abundance, or Botan. It is as near curculio-proof as can be expected. Fruit large and showy; color amber, turning to a rich cherry-color, with a white bloom; flesh light yellow, juicy, tender, sweet and excellent; stone small and parts readily from the flesh. One of the best Plums for canning. July.

Burbank. Fruit large, ranging from 5 to $5\frac{1}{2}$ inches in circumference, nearly globular, clear cherry-red, with a thin lilac bloom; flesh a deep yellow, very sweet, with a peculiar and very agreeable flavor; tree vigorous, with large and rather broad leaves; commences to bear usually at two years old. July.

Chabot. Fruit large, nearly round; skin yellow, washed with red on sunny side;



Abundance Plums

flesh yellow, juicy and of good quality; tree vigorous, resembling Kelsey in growth, but with larger leaves.

Climax. Fruit heart-shaped, as large as Wickson, and more highly colored; ripens before any other good Plum, and nearly a month before Wickson. Tree extremely vigorous, rather upright grower, with strong branches and very large leaves.

Ogon. It is large, nearly round; of the brightest golden yellow; flesh firm, sweet, rich and dry; ripens a little earlier than Abundance or Botan, and is the most free of all Plums, as there is not a particle of flesh that adheres to the stone when broken or cut open.

Red June. Fruit medium to large, cordate and very prominently elongated at the apex; suture deep, generally lopsided; deep vermillion-red all over, with a handsome bloom; very showy; flesh light lemon-yellow or whitish, firm and moderately juicy, not stringy, slightly subacid to sweetish; cling to half cling; pit small. Tree vigorous and productive.

Satsuma Blood. A purple-fleshed Plum of very vigorous growth, with rank, dark green foliage; enormously productive of fruit; large; skin dark, purplish red, mottled with bluish bloom; shape globular, or

Japan Plums—Continued

with a sharp point; flesh firm, juicy, dark red or blood-color, well flavored, firm, quality very good; pit very little larger than a cherry-stone; fruits at two or three years of age.

Early Gold. One of the grandest Plums in existence; pure transparent yellow; quality exquisite—a huge honeydrop. Originated by Luther Burbank. Should be planted in every home orchard, and by the hundreds for market. Not one-half enough good plums are grown to supply the demand.

Wickson. The fruit is evenly distributed all over the tree, and from the time it is half grown until a few days before ripening is of a pearly white color, but all at once soft pink shadings creep over it, and in a few

days it has changed to a glowing carmine, with a heavy white bloom; the stone is small and the flesh is of fine texture, firm, sugary and delicious, and will keep two weeks or more after ripening, or can be picked when hard and white, and will color and ripen almost as well as if left on the tree.

Select Nectarines

The Nectarine requires the same culture, soil and management as the peach, from which it differs only in having a smooth skin, like the plum.

Downton

Boston

Elrige

Red Roman.

Select Cherries

The Cherry succeeds on most soils, and in nearly all localities throughout this country, but attains its greatest perfection upon those of a light, gravelly or sandy nature, provided it be in good condition. In planting the Hearts and Bigarreaus, avoid wet or damp situations. The Dukes and Morellos will bear more moisture, but will flourish best in a soil that grows the others to the greatest perfection.

Heart and Bigarreau

Abessa. Originated in the Grand Valley of Colorado near Palisade. Large, bright red; first-class in quality. Tree vigorous and an abundant bearer. Ripens 10th to 15th of June.

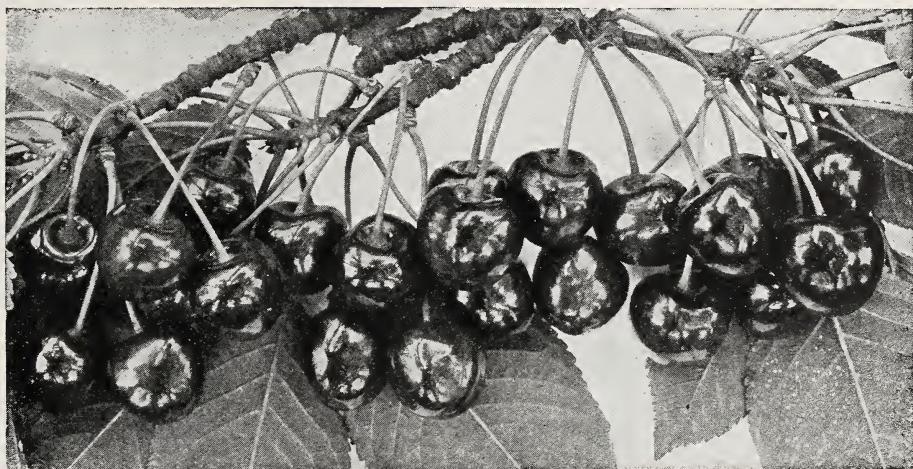
Bigarreau, or Graffion (Yellow Spanish). Very large, often an inch in diameter; pale yellow, with a handsome, light red cheek

to the sun; flesh firm, with a fine, rich flavor. This variety, though not of the highest excellence, has become, from its great size, beauty and productiveness, a general favorite. July.

Bing. A native of Oregon, fruit very large, bright and glossy, dark crimson. Of the most excellent quality. July.



Block of 2-year Cherry Trees



Rockport Bigarreau Cherries

Heart and Bigarreau Cherries—Continued

Black Tartarian. Very large, purplish black; half tender; flavor mild and pleasant. Tree a remarkably vigorous, erect and beautiful grower and an immense bearer. June.

Downer's Late Red. Rather large; light red; tender and juicy, slightly bitter before fully ripe. Tree a vigorous, erect grower and very productive. One of the best late Cherries.

Early Purple. An exceedingly early variety, ripening in May; fruit of medium size; dark red, becoming purple at maturity; flesh purple; tender, juicy, with a rich and sweet flavor; indispensable as an early variety; productive.

Elton. Large, pointed; pale yellow, nearly covered with light red; half tender, juicy, rich and delicious. Tree very vigorous, spreading and irregular. Bears regular and profuse crops of the finest fruit. May and June.

Florence. Fruit very large, amber-yellow, marbled and mostly covered with bright red; flesh amber-color, very firm, sweet, rich flavor; hangs long on the tree, and will keep several days after gathering. Tree is very vigorous, hardy and prolific. Ripens in July.

Governor Wood. One of the best of Dr. Kirkland's seedlings, and deserves a place in every good collection; fruit large, skin light yellow, shaded with bright red; flesh nearly tender, juicy, sweet, rich and delicious. Tree vigorous, productive and hardy. June.

Napoleon Bigarreau. A magnificent Cherry of the largest size; pale yellow, with

a bright red cheek; flesh very firm, juicy and sweet. Tree a vigorous, erect grower, and bears enormous crops. Profitable for marketing. June.

Rockport Bigarreau. Large, deep brilliant red; flesh rather firm, juicy, sweet, rich, with an excellent flavor; a very desirable and profitable Cherry. June.

Schmidt's Bigarreau. This noble Cherry was introduced into England from Belgium by Mr. Rivers, and is by far the largest of all black Bigarreau Cherries. Fruit grows in clusters and is of large size, round and somewhat oblate; skin is of a deep black; flesh dark, tender, very juicy, with a fine, rich flavor. The stone is very small for the size of the fruit.

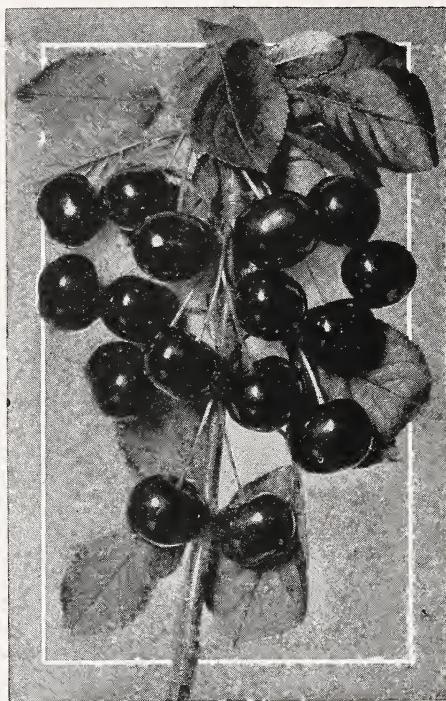
Windsor. Obtuse heart-shaped, dark purple or nearly black; flesh quite firm, fine in texture and rich in flavor; ripens early. Tree is vigorous, hardy and an early and good bearer.

Duke and Morello Cherries

The Dukes and Morellos are not so vigorous and upright in their growth as the Hearts and Bigarreaus, forming low, spreading heads, with acid or subacid fruit.

Dyehouse. Produces regular annual crops; fruit medium; skin bright red, darkened in the sun; flesh soft, juicy, tender, sprightly subacid, rather rich; partakes of both the Morello and Duke in growth, wood and fruit; it is very productive. We consider it superior to Early Richmond.

Early Richmond, or Kentish. Medium size, red; flesh melting, juicy, and, at maturity,



Montmorency Cherries

Duke and Morello Cherries—Continued
of a rich acid flavor; very productive; fine for cooking. Commences ripening last of May and hangs long on the tree.

English Morello. Above medium size; skin dark red, becoming nearly black; flesh juicy, subacid, rich. July.

May Duke. Medium size; dark red; melting, rich and juicy; an old and popular sort; ripens after Early Purple.

Montmorency. A beautiful, large red, acid Cherry; larger than Early Richmond and fully ten days later; very prolific and hardy; a variety of great value; free grower.

Olivet. Large; very shining, deep red; tender, rich and vinous, with a very sweet, subacid flavor. It ripens in May or early June.

Ostheim. (Russian.) Rather slender grower; very hardy; fruit of good size and quality; trees are very productive.

Reine Hortense. A French Cherry of great excellence; large; bright red; flesh tender, juicy, very slightly subacid and delicious. Tree vigorous and productive. One of the very best Cherries. Last of June.

Royal Duke. Large; dark red; flesh reddish, tender, juicy and rich. Last of June.

Terry Early. Introduced by Mr. H. A. Terry, of Iowa. Large, brilliant red be-

coming darker as it ripens; flesh firm and crisp, juicy, slightly colored, becoming darker when dead ripe; moderately acid, rich; seed small. Tree upright, very handsome and one of the strongest growers of all the sour Cherries. Hardy and a heavy, dependable bearer. June, earlier than Early Richmond.

Wragg. Supposed to hail from North Germany; a good grower and an immense bearer; quite late, and a valuable Cherry.

Select Apricots

This beautiful and excellent fruit needs only to be known to be appreciated. It ripens a month or more before the best early peaches and partakes largely of their luscious flavor. The tree is even more hardy than the peach and requires about the same treatment. To make a crop more certain, plant on the north or west side of a wall, fence or building.

Breda. Small, round; dull orange in the sun; flesh orange-colored, juicy, rich, vinous and high-flavored; tree very hardy and productive. July.

Early Golden (Dubois' Early Golden). Small; pale orange; flesh orange, juicy and sweet; productive. Last of June.

Harris. Large, roundish, with deep suture; rich golden yellow, with faint blush; excellent; freestone. First of July.

Moorpark. One of the largest and finest Apricots; yellow, with red cheek; flesh rather firm, orange, parting from the stone; sweet, juicy and rich, with a luscious flavor. July.

Montgamet. Medium size; early, excellent; hardy; one of the best.

Peach. Very large; yellowish orange; and mottled with dark brown to the sun; flesh rich yellow, juicy, with a rich, high flavor; productive. First of July.

Superb. A hardy seedling from Kansas. The best flavored, most productive, hardy Apricot yet produced; quality is exquisite; medium size, light salmon-color.

Improved Russian Apricots

Alexander. An immense bearer; fruit of large size; oblong; yellow, flecked with red; flavor sweet and delicious. Tree hardy; one of the best. July 1.

Alexis. Large to very large; yellow with red cheek; slightly acid, but rich and luscious. Hardy; abundant bearer. July 15.

J. L. Budd. Large; white, with red cheek; sweet, juicy, extra fine, with a sweet kernel as fine flavored as the almond; the best late variety and a decided acquisition. Tree a hardy, strong grower and profuse bearer. August.

Select Quinces

The Quince is attracting a great deal of attention as a market fruit. Scarcely any fruit will pay better in the orchard. The tree is hardy and compact in growth, requires but little space, is productive, gives regular crops, and comes early into bearing. The fruit is much sought after for canning for winter use. When put up in the proportion of about one quart of Quinces to four of other fruit it imparts to them a most delicious flavor.

It flourishes in any good garden soil, which should be kept mellow and well enriched. Prune off all the dead and surplus branches, and thin out the fruit if bearing too freely.

Bourgeat. Very strong, handsome grower, great cropper, bearing heavy loads of fine, smooth fruit; fine grained, good quality, high flavor. Matures in early October, but one of the best keepers.

Champion. This variety originated in Georgetown, Conn.; said to be larger than the Orange; fair, smooth, of fine quality and a late keeper.

Meech's Prolific. Certainly a fine variety, and cooks very tender. The fruit is very large, exceedingly handsome and attractive, with a most delightful fragrance. The tree is strong, sturdy and very prolific.

Orange, or Apple. Large, roundish, with a short neck; color light yellow; tree very productive; this is the most popular variety in the country; a great bearer. Ripens in October.

Rea (Rea's Seedling). A variety of the Orange Quince, one-third larger, of the same form and color, fair, handsome; a strong grower, of good quality, and bears well.

Mulberries

This fruit is getting very popular, especially South, where it is fine food for hogs and poultry. The tree is also fine for shade, as it grows rapidly and is very hardy.

Downing's Black. Fruit very large, black and subacid, of extra-good quality; mostly planted North. Fruits about June 1 to middle of July.

Hicks' or Everbearing Black. This variety is very popular South, as the tree is a very rapid grower, bears very young and has a long season, very often from June 1 until the middle of August. Very sweet.

New American. This we consider equal to Downing's in all respects, continuing in bearing fully as long, and a harder tree. Fruit jet-black.

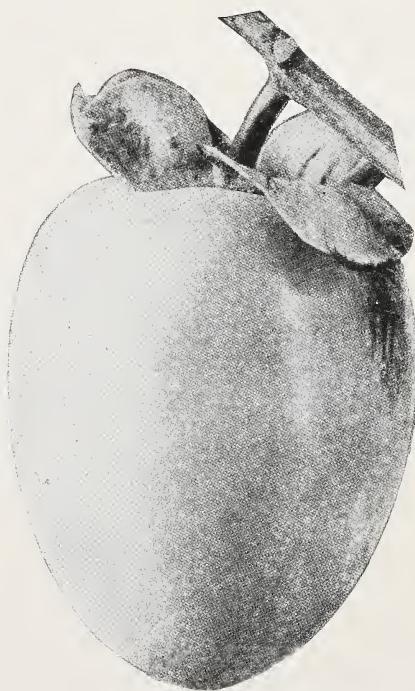
Russian. Bought from Russia by the Mennonites. Tree a very hardy and rapid grower; fine as a shade tree; bears very young and very heavily.

White English. Fruit very small and sweet, but not so good as Hicks'.

Japanese Persimmons

Among, or Yemon. Name of a Japanese ornament. Round, flattened, deeply ribbed; dark orange-red and sometimes yellowish red; $2\frac{1}{2}$ to 3 inches in diameter; average weight 6 ounces and occasionally a specimen weighing 16 ounces is produced; very sweet; flesh red, and is edible while still solid, but quality improves as it becomes soft. Maturity September to end of November. Tree of moderate height.

Hiyakume. Weighs 100 "me," a unit of Japanese weight. This is, perhaps, the most desirable of all the round, red-fleshed varieties, and as the fruit affects various shapes, it is known under many names.



Hiyakume Persimmon



Eaton

Lutie

Moyer

Niagara

Select Grapes

The vine comes quickly into bearing, yielding fruit usually the third year after planting, but sometimes on the second; requires but little space, and when properly trained is an ornament to the yard, garden or vineyard.

It is stated by some of the most eminent physiologists that among all the fruits conducive to regularity, health and vigor in the human system, the Grape ranks number one. We hope soon to see the day when every family shall have an abundant supply of this excellent fruit for at least six months in the year.

The soil for the Grape should be dry; when not naturally so should be thoroughly drained. It should be deeply worked and well manured, always bearing in mind that it is an essential point to secure a warm, sunny exposure.

The best Grape trellis is probably the wire trellis. This is constructed by planting posts as far apart as you choose to have the length of your trellis; stretch the wires, four in number, about eighteen inches apart, letting them pass through stakes at proper distances from each other to support the wire. As the wires are contracted by the cold, and are likely to break or sway the posts from their places, they should be loosened as cold weather approaches. When, however, it is not convenient to make a wire or other trellis, very good results are had with the old vineyard system of training to stakes. The vines are planted 8 feet apart, in a place exposed to the sun and protected from cold winds, if convenient, and are trained to an upright stake. This method is as simple as the cultivation of Indian corn. Often a large and uncomely rock may be converted to usefulness and beauty by planting a Grape vine on its sunny side, and making use of the rock as a trellis.

To secure the best results, annual and careful pruning is essential. The following is regarded as the best method: Commencing with a good, strong vine, such as we furnish, cut back to two buds when planted. The following spring allow but two of the strongest buds to throw out shoots. These, in the fall, will be from 7 to 10 feet long, and should be cut back to within 4 or 5 feet of the root. The next spring the vine should be fastened to the lower part of the trellis. When growth commences, pinch the buds off, so that the shoots will be from 10 to 12 inches apart. As these grow, train them perpendicularly to the second, third and fourth bars of the trellis. No fruit should be allowed to set above the second bar of the trellis.

During the season when the shoots have reached the upper part of the trellis they may be pinched, to prevent further growth. After the fruit is gathered and the vine has shed

Grapes—Continued

its foliage, the cane should then be cut back to two buds. The following spring allow but one bud to throw out a shoot, and treat as in the previous year. This system of pruning should be followed each year. After the vine has undergone the fall pruning it may be laid upon the ground and covered with boughs, to protect it through the winter. Grape vines should be top-dressed in the spring.

Grapes may be kept through the winter, and even all the year, in small boxes holding three to five pounds, if placed in a cool, dry room, of even temperature; or they may be spread out to dry for two days and then laid in market baskets, and suspended in a cool, dry cellar.

Few things pay better than a good vineyard. In 1879 we planted one and one-quarter acres of Concords. In 1881 these vines bore a fair crop, which increased each year until, in 1884, the sales from the one and one-quarter acres, at the low price of three cents per pound, gave a net receipt of \$400. We could give other similar instances which show the enormous profits in Grape growing.

The following list contains the best-known sorts of the hardy American varieties:

Brighton. Bunch large, rather irregular; berries above medium, round, dark red; quality best. Ripens early.

Campbell's Early. Vine strong, vigorous and very productive; clusters large and perfect; berries large, black, with a perfect bloom; skin thin; an admirable keeper and shipper; flavor rich, sweet, slightly vinous. Early September.

Concord. There is no Grape in the catalog so popular or planted so extensively as this. It succeeds well in almost all parts of the country, and although of Northern origin, it is better here than in its native place. Vine a very vigorous grower and enormously productive; comparatively free from disease; bunches large, compact; berries large, round, black, with a blue bloom; a profitable market sort.

Catawba. Bunches and berries large; skin pale red; flesh juicy, sweet, aromatic; productive. September.

Delaware. Bunches medium size, compact; berries rather small; skin of a beautiful light red color; exceedingly sweet, sprightly, vinous and aromatic. Ripens in August.

Empire State. Bunch large, shouldered; berry medium; skin slightly tinged with yellow; flesh tender, rich, juicy, sweet and sprightly; ripens a little after Hartford; good grower and productive.

Eaton. Bunch large, compact; berries very large, round, black, covered with a thick blue bloom. In general appearance it resembles Moore's Early. Large and excellent.

Ives. Bunch medium to large, sometimes shouldered, compact; berries medium, black; flesh sweet, pulpy and somewhat foxy; hardy, vigorous, and bears well; deservedly popular. Early.

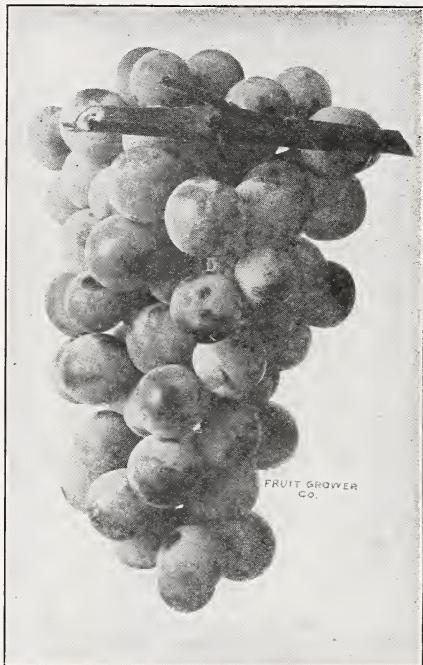
James, or Black Scuppernong. Berry of large size and good quality, black; vine very prolific. Commences to ripen about the first of August and continues until frost.

Lutie. Dark red. Bunch and berry medium to large; skin tough and thick; flesh pulpy, sweet and quite juicy; quality only fair; vine hardy, vigorous and productive. It sells well as an early red Grape, ripening about with Moore's Early.

Martha. This is one of the most reliable white Grapes yet known; bunch medium, compact, shouldered; berry white or greenish, turning to pale yellow when fully ripe;



Empire State Grapes

Grapes—Continued**Worden Grapes**

skin thin; flesh very sweet and juicy; a seedling of the Concord; a little earlier. Amongst white Grapes it is like Concord amongst the blacks.

Moyer. It ripens some three weeks before the Concord; not quite as high flavored; very juicy and tender to the center; skin thin but tough; bunches medium; fine shipper. The color is a rich dark red.

Moore's Diamond. A pure native; bunch large, compact; berry medium size; color greenish white, with a yellow tinge when fully ripe; flesh juicy, almost without pulp; very good; vine vigorous and productive.

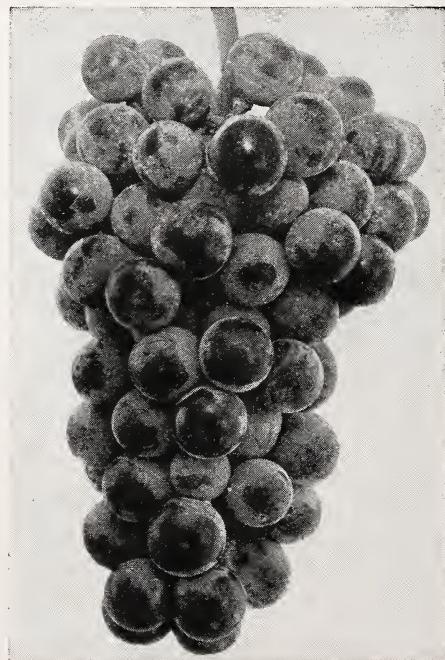
Moore's Early A seedling of the Concord, combining the vigor, health and productiveness of its parent, and ripening a few days earlier than the Hartford; bunch medium; berry quite large; color black, with heavy blue bloom. Its extreme hardiness and size will render it a popular market sort.

Niagara. Bunch large, generally shoudered; berry large, roundish; color greenish white, turning to light yellow; skin thin

but tough; flesh slightly pulpy, tender and sweet; has a decidedly foxy flavor before fully ripe, which it pretty well loses at maturity. Ripens with Concord.

Scuppernong. A Southern grape, too tender for a more northern latitude than Virginia; does not succeed even in Virginia much above the tide-water line, but southward it is quite hardy and valuable; vine a vigorous grower; requires no pruning; bunch small, loose, not often containing more than six berries; fruit large round; skin thick, light green; flesh pulpy, juicy, sweet; produces enormous crops. Continues in season about six weeks. A popular Southern Grape of the Muscadine type, and where it thrives is the most luscious and satisfactory Grape grown, either for table use or for the making of a high-quality wine.

Worden. Said to be a seedling of Concord, and is a slight improvement on that variety; ripens a few days earlier; bunch large and compact; berry large, black and of good quality; vine vigorous and productive.

**Campbell's Early Grapes**

SMALL FRUITS

The small fruits, such as Strawberries, Raspberries, Blackberries, Gooseberries, Currants, etc., ripening from the first of June till fall, are everywhere capable of successful cultivation, and yield large returns at comparatively small expense. They should have a place in every garden. Since the introduction of self-sealing jars and cans, they can be had throughout the year almost as fresh as when gathered.

Select Currants

Black Naples. Very large; black; valuable for jams and jellies; has a strong, musky odor.

Cherry. Very large; red; strong grower and moderately productive; fine for preserving, and a valuable market variety.

Fay's Prolific. Color rich red; as compared with the Cherry Currant, Fay's Prolific is equal in size, better in flavor, containing less acid, and five times as prolific, and from its long, peculiar stem, less expensive to pick.

Lee's Prolific. A black variety of recent introduction, and perhaps the best of its class; earlier than Black Naples, with the peculiar musky flavor of that variety; fruit large; very prolific.

North Star. This new Currant is of remarkably vigorous growth and wonderfully prolific; the stems of fruit thickly set average 4 inches in length.. The fruit is very sweet and rich, a fine dessert fruit and un-

equalled for jelly. It is extremely hardy; bears early.

Perfection. In color it is a beautiful bright red and a size larger than Fay; the clusters average longer and the size of the berries is maintained to the end of the bunch. It is one of the most productive Currants we have ever known, and in quality it is superior to anything in the market, being of a rich, mild, subacid flavor and having plenty of pulp with few seeds.

Pomona. Is a strong grower; hardy and very productive. Bright, transparent red, and very sweet; few and very small seeds. A very valuable sort.

Red Dutch. Larger than the common red and clusters much larger and less acid; one of the best red currants.

White Grape. The best white currant; bunch moderately long; berries large; very productive; less acid than the red currants; fine for table.

Gooseberries

Until quite recently no interest has been felt in the cultivation of this fruit further than to grow a meager supply for home-consumption, yet there are few crops that will yield as satisfactory returns; certainly none more certain with so little expense in cultivation.

Downing. A seedling of the Houghton; an upright, vigorous-growing plant; fruit larger than its parent; color whitish green; flesh rather soft, juicy, very good; productive. Valuable market sort.

Houghton's Seedling. Rather small; pale red; flesh tender, juicy, sweet and pleasant; produces enormous crops; free from mildew. Most profitable market variety.

Pearl. Very highly commended after extensive testing; good in all respects. Very similar to Downing, in fact, some growers have claimed there is no difference, but the two sorts are certainly distinct. Berries round or slightly oval, smooth, light yellow-

ish green. Has all of Downing's good traits, a little larger, more prolific. July 10.

Red Jacket (Josselyn). As large as the largest; berry smooth; very prolific and hardy; quality and foliage the best. For many years it has stood close to Triumph. Crown Bob, White Smith, Smith's Improved, Downing, and a dozen other English sorts, and while all these have mildewed more or less in leaf and fruit, mildew has never yet appeared on Red Jacket.

Smith's Seedling. A new variety grown from seed of the Houghton; more vigorous and upright in growth of plant than its parent; the fruit is larger and somewhat oval in form; light green flesh, moderately firm, sweet and good; shy bearer.

Raspberries

Both red and blackcap Raspberries are very easily grown. Blackcaps should be planted in rows 3x7 feet and the red 3x6 or 5 feet each way, and if particular in planting to work both ways will cost very little for cultivation. They will do well on almost any good, well-drained soil, and the richer the better. One of our gardeners received from one acre of Cuthbert \$405 at wholesale price.

Red Raspberries

Cuthbert (Queen of the Market). Canes strong, upright, very vigorous, sometimes branching; foliage luxuriant; fruit large to very large; red; moderately firm, with high, sprightly flavor; very productive. Its many valuable qualities render it desirable for home- or market-culture. It succeeds well generally, and is almost the only one that can be relied on in the cotton states. We commend it to planters in all sections.

Columbian. An improvement on Shaffer's, which it resembles, but the berry is firmer; adheres to the bush much longer and retains its shape better, both on the market and in canning; bush a strong grower, attaining a very large size; one of the hardiest, and

wonderfully prolific; unexcelled for productiveness, and stands at the head for canning, making jam, jelly, etc.; fruit very large, dark red.

King. Origin, Virginia. Probably the best early red. Strong grower, very productive; berries large, firm, bright, beautiful. A good early market sort. June 1.

St. Regis. Is the only Raspberry, thus far known, that will yield a crop of fruit the season planted. The berries are of a bright crimson, of large size and of surpassing quality—rich and sugary with full Raspberry flavor. They are of exceedingly meaty, firm texture and keep in good condition longer, after being gathered, than any other red Raspberry. As a shipper it is unexcelled, making it one of the most valuable Raspberries for market.

Thompson's Early Prolific. For earliness, hardiness, vigor, beauty and quality it is unsurpassed; very productive of large, bright red, firm berries of good quality. Its earliness causes it to bring the highest prices in market.

Black Raspberries

Cumberland. Large berry; hardy, firm and productive. It is a strong, vigorous grower, and fully equal to the Gregg, ripening a little in advance of that well-known standard variety. For those who prefer a black Raspberry, Cumberland will prove one of the most satisfactory and profitable to plant. The plant is particularly strong and vigorous.

Gregg. This is one of the largest, if not the largest, of the Blackcap family; fruit large, black, with a slight bloom; flesh quite firm, moderately juicy, sweet and rich; the fruit ripens late and very evenly, making the picking season short; it is a very strong grower and good bearer; very desirable.

Kansas. Strong, vigorous grower, standing extremes of drought and cold, and bearing immense crops; early, ripening just after Palmer; berries size of Gregg, of better color; jet black and almost free from bloom; firm, of best quality; presents a handsome appearance and brings highest price in market.

Munger. Resembles Gregg very much. It is a better-flavored berry than Gregg,



Columbian Raspberries

Raspberries—Continued

tougher in texture, and therefore a better shipper. Its season of ripening is from five to eight days later than Gregg, and has a special faculty of withstanding drought and hot sun. The canes, too, resemble Gregg, are free from disease, upright in growth and have never yet been affected by the cold of winter. One of the best black Raspberries.

Ohio. This berry is one of the most

profitable on the list at the present day for evaporating. The fruit is of medium size, but very sweet; one of the best for table use.

Yellow Raspberry

Golden Queen. A seedling or "sport" of the Cuthbert, and in hardiness and vigorous growth of plant resembles that variety; fruit of large size; color beautiful yellow; flavor excellent.

Blackberries and Dewberries

Should be planted in rows 6 to 7 feet apart, 3 to 5 feet in the rows. Keep the ground light and rich. Pinch the canes back when they have reached 4 feet in height.

Austin's Dewberry. Fruit very large. Enormous bearer. The most productive market variety we have ever grown, and is eight to ten days ahead of any other. Strong and vigorous grower, and stands our hottest summers perfectly. Free from rust.

Blowers. Among the very hardest. Large, jet black, sweet; ships well, handles well. We recommend it.

Early Harvest. One of the earliest, if not the very earliest Blackberry yet introduced, ripening two weeks before Wilson's Early; berry medium size, good quality and very prolific; it is firm and very attractive in appearance.

Eldorado. Berries are very large, jet-black, borne in large clusters, and ripen well together; they are very sweet, melting and pleasing to the taste, have no hard core, and keep for eight or ten days after picking with quality unimpaired.

Erie. Very productive of berries of largest size, coal black, firm and solid, and sells in the market at highest prices; fine form and ripens early. Extensively planted in family and market gardens.

Himalaya. It is said to have been discovered in the Himalaya Mountains, 6,000 feet above sea level, and to be of ironclad hardihood. The berries are of great size and are produced in enormous clusters, rendering it the most productive of all known berries; that they are rich and sweet in flavor, with no core, and literally melt in the mouth. The canes are extremely vigorous, making a growth of twenty to thirty feet in a year, and do not die back to the root after fruiting, as do Raspberries and Blackberries, but fruits upon the same wood from year to year, like the grape.

Iceberg. A new white Blackberry; was originated by Luther Burbank; clusters large; berries as large, earlier, sweeter and more tender throughout than the Lawton; white; transparent.

Kittatinny. Has the habit of continuing long in bearing, and yielding its fruit through period of six to eight weeks. Very large and productive, and of good quality.

Lucretia. This is a trailing Blackberry, or Dewberry; a good grower and productive; fruit large and of good flavor.

Wilson's Early. A well-known and most valuable sort; it is of very large size and very productive, ripening its fruit quite early and maturing the whole crop in a short time, adding thereby greatly to its value as a berry for early marketing.

Ward. A new Blackberry of great merit. A seedling of the Kittatinny, which it resembles somewhat. Very strong grower, and perfectly hardy. The fruit is black throughout and very prolific, firm, and good for shipment, yet tender and melting, and of highest quality. Very promising new variety.



Early Harvest Blackberries



Well Cultivated Strawberry Patch

Strawberries

We think there is no fruit that is more healthful and will give better satisfaction. No home or garden should be without them, and should have fresh berries from three to five weeks. Strawberries should be planted either in the fall or spring. We have better success in planting in early spring, although we plant up to the time that berries are nearly ripe, and we always succeed. Before planting we clip the roots off, and if it is late in the spring we cut all foliage off and dip roots in a thin puddle of mud before planting. When we used to grow Wilson largely for market, we planted with rows 3 feet apart and 12 to 15 inches in the row, but since we have been growing strong varieties, as the Tennessee Prolific has proved to be, we plant rows 4 feet apart and 3 feet apart in the rows, and on good land we find it plenty close. While any land that will grow good corn will grow good Strawberries, it will pay to have or make the land very rich before planting. It takes no more work for an acre to produce 150 to 200 bushels than 25 to 50 bushels.

In the list that we present to you they have nearly all been well tried by us, but we do not advise you to plant many varieties, as any two or three will give you all you wish for home use, and, as a market berry here, we would plant only the Tennessee Prolific.

The blossoms of most varieties are perfect, or bisexual, except those marked P., which are destitute of stamens, and are termed pistillate, or imperfect-flowering varieties. They must be planted near some perfect-flowering sort or they will produce little or no fruit. Bubach is of this class, but among the most productive when plants of such varieties as Tennessee Prolific, Lady Thompson, Missionary, and other perfect-flowering sorts are planted in the same field alternately. At least every fifth row in a field of pistillates should be planted with some perfect-flowering sort; while, if as many of a perfect-flowering sort are to be planted, it is better to plant in alternate rows. Klondyke is perfect-

Strawberries—Continued

flowering but does not fertilize itself well, and needs other perfect-flowering sorts planted with it.

To grow fine berries, they should be cultivated well from spring to fall, running a light cultivator after each rain, and also keep all weeds pulled out of rows. If the row is kept from 15 to 18 inches wide, and the plants thinned out in the rows, the result will be much larger and finer berries.

Aroma. (Per.) Plant shows no weakness of any kind. Fruit very large, roundish, conical, rarely misshapen; glossy red, of excellent quality, and produces in abundance.

Cumberland (Cumberland Triumph). Very large, regular and uniform in size; light scarlet, very handsome; flesh juicy and good flavor; plant very vigorous and productive. It succeeds well almost everywhere.

Gandy. One of the latest berries we have. The berries are large, uniform in size, and of bright and firm color; very popular as a market variety, coming in when other varieties are run down and small. It is fine for home-market.

Klondyke. (Per.) Berries uniform, shapely, handsome; dark red; mild and delicious, very juicy; sell quickly. Plants make a remarkable growth, are tall, compact, stalks strong, leaves light green; makes abundant runners and an unusual number of crowns. Yields are wonderful. Blossoms are perfect, but do not fully fertilize themselves and need other sorts near.

Lady Thompson. Origin, North Carolina. It has more good points than any berry ever grown, being very early, very large, a perfect bloomer and good shipper. It is of good color and fine flavor.

Missionary. (Per.) Early; medium size. Originated in the vicinity of our city, where it has given general satisfaction. The originator describes it as follows: "Large size, beautiful color, with the appearance of being varnished; large double calyx, like Gandy; immensely productive. Its season is from four to five weeks. Very richest and best quality; best shipper, has a very tough skin, not easily broken by handling."

Richmond. An exceedingly rich and fine quality berry with a large, double calyx, making it a fine shipper. It is of large size, beautiful, glossy red, splendid flavor and remarkably productive. In bearing four to five weeks.

Tennessee Prolific. A seedling of Crescent crossed with Sharpless, clearly showing parentage of both; perfect flowering, vigorous, stock plant, healthy in every way; very productive of medium to large bright scarlet berries of fine quality; ripens medium to early; is a fine market or family berry, thriving well on quite light, dry soil.

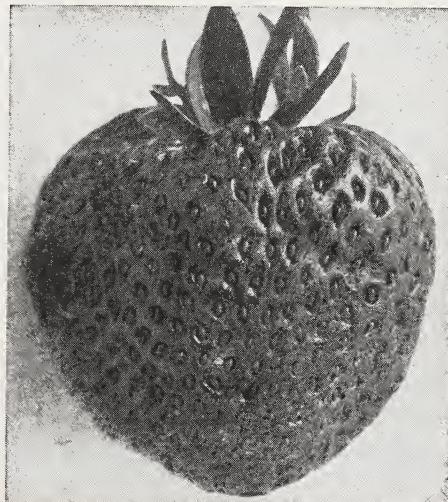
Fall-Bearing Strawberries

A new departure in this, the most delicious of fruits. The Fall-Bearing Strawberry is a decided success and making a great hit.

Americus. (Perfect). This is one of the most thrifty growers of any of the fall-bearing varieties. It does not seem to be affected by the fall crop of fruit produced, and comes out in the spring looking as fresh and vigorous as a June bearing sort. The fruit is from medium to large in size, conical in shape, rich red in color and of a delicious flavor.

Progressive. (Perfect.) A good plant maker, strong, with healthy foliage. Bears a crop the same season set. Fruit large, sweet and of the choicest flavor. Plant it and you will have strawberries from June until November.

Superb. (Perfect.) A seedling of Autumn crossed with Cooper. It is a healthy grower and makes runners freely, however the runners are long so that it does not mat too thickly. Fruit large, dark red, glossy, firm, and of extra good quality. Does not fruit much on the new runners. Considered one of the most valuable of the fall-bearing varieties.



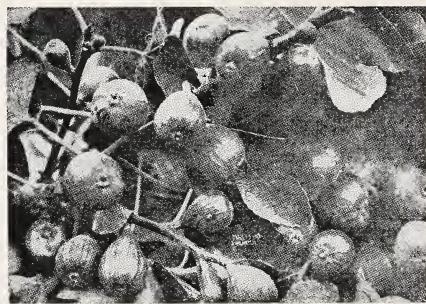
Missionary Strawberry

Figs

Brunswick. Very large; violet; quality excellent; very reliable. Bears young, often fruiting in the nursery rows, and is very productive. Equally valuable as a dessert fruit or for preserving.

Brown Turkey. Medium; brown; sweet and excellent; very prolific. Most reliable for field culture. One of the best varieties for preserving.

Lemon. Medium to large, yellow, sweet; a profuse and early bearer; very desirable; pulp sweet and of excellent quality. Trees of this variety have been known to yield twelve bushels of excellent fruit for many years in succession.



Brown Turkey Figs

NUT-BEARING TREES

Our foremost enterprising fruit-growers are planting Nut Trees largely for market purposes; and others who enjoy the nuts during winter are realizing that in order to have an abundant supply it is only necessary to plant the trees, as hardy varieties are now grown that succeed in all sections of the United States.

Until recently Nut Trees have been but little grown in nurseries, and in consequence all transplanted trees have come from the forests, or where they have come up and grown naturally, and having but few or no fibrous roots, their transplanting has been attended with much uncertainty, and the impression has been formed that they could not be transplanted, but that, to insure success, the seed must be planted where the tree is intended to stand. This is erroneous, and has deterred many from engaging in this profitable industry. Many of the Nut-bearing Trees, when grown in nurseries, are well supplied with fibrous roots, and can be transplanted as safely as an apple tree, and the planter has the benefit of the three or four years' growth in the nursery over that of planting the seed, with the uncertainty of their coming up and the time, care and attention required to get them properly started.

Chestnuts

Paragon (Great American). The most widely planted and most uniformly success-



American Chestnuts

ful variety yet cultivated in the United States. The three or more broad, thick, handsome nuts in each bur are of extra size and quality. The tree makes a strong growth, bears early and abundantly. Trees four years from graft have produced one bushel each.

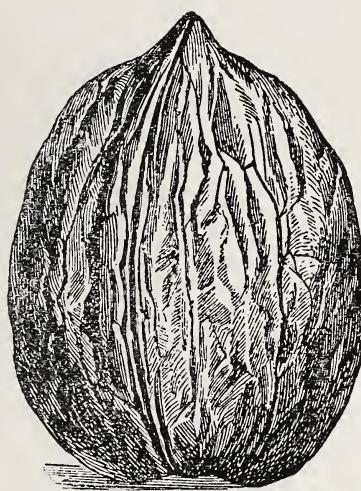
American. The well-known native variety; a stately tree, with broader leaves than the Spanish, and producing smaller nuts but a large quantity of them. The timber is very useful for many purposes.

Butternuts

A handsome, rapid-growing, luxuriant, tropical looking tree; very ornamental and productive; the nuts are somewhat like black walnuts, but longer and flat; the kernel is much sweeter and rich and more delicate; fine flavor.

Walnuts

Siebold's Japan. Of the finer imported Walnuts this is the species best adapted by its hardy, vigorous habit for general cul-



English Walnut

Walnuts—Continued

ture in our country. It grows with great vigor, assuring a handsome shape without pruning, and has withstood a temperature of 21 degrees below zero without injury. Its nuts are considerably larger than the common hickory-nut, and borne in clusters of fifteen to twenty. The kernels are meaty, delicate and can be removed entire.

Japan Cordiformis. Differs from the above chiefly in the form of the nuts, which are broad, pointed and somewhat flattened. The kernels are large, sweet and easily removed from the shell.

English. A fine, lofty-growing tree, with a fine, spreading head, and bearing crops of large and excellent nuts. The fruit in a green state is highly esteemed for pickling, and the great quantity of the ripe nuts annually imported and sold here attests to its value; the tree is peculiarly well adapted to the climate of the South.

American Black. This is the common native variety. The nuts are excellent and always desirable; besides, the wood is very valuable for many uses.

Budded and Grafted Pecans

There are many varieties offered—far more than is necessary. We advise planting only a few of the leading standard sorts, such as have been proved by experience to be the best, size, quality, productiveness and thinness of shell considered. Such we offer as described below:

Stuart. Large, averaging forty to fifty to the pound; shell moderately thin; crack-

ing quality good; kernel bright, plump; flavor rich and good. Tree strong, upright, spreading grower and an abundant bearer.

Van Deman. Large, averaging forty-five to fifty-five to the pound; form long; shell moderately thin, cracks easily; quality rich and good. Tree strong, moderately erect, productive.

Moneymaker. Large, roundish, good. Tree a good grower and very productive; one of the earliest to come into bearing.

There are many other well-known varieties, such as Russell, Bolton, Schley and others, but it seems to be the general opinion that there is nothing that will surpass Stuart, Van Deman and Moneymaker.

Indiana. This variety originated in Knox County, Indiana. The original tree is about 5 feet in circumference and 60 feet high. The nut is thin shelled, medium sized, very uniform, and is one of the largest of the far northern types. The kernel is solid, fine grained, sweet, nutty and of excellent quality. This variety is exceedingly hardy and should bear regular crops in localities far northward.

Shellbark

A species of the Hickory. The nut is small, rather flat, with thin shell; rich, sweet and delicious.

Almonds

Hard Shell. A fine, hardy variety, with a large, plump kernel, and with large, showy blossoms.

Soft, or Paper-Shell. This is what is known as the "Ladies' Almond," or "Lady-Finger of the Shops," and although preferable to Hard Shell, it is not so hardy; kernels sweet and rich.

English Filbert

(*Hazelnut*)

The fruit of this being so much larger and better flavored than our native species, gives it the preference for cultivation in localities where it will succeed.



Van Deman Pecan

ESCUENT ROOTS

Asparagus

There is not a more valuable vegetable for the home or market-garden, both for health and profit, than this, and no garden should be without it. For home use, one hundred roots, or one row 60 yards long, will furnish Asparagus for the table every day from the first of April until the 15th of June. If wanted for market or bleached for home use, plant in rows 6 feet apart and 18 inches to 2 feet in the rows.

Preparation.—For early production, choose a light land, and plant rows running north and south. Open out with plow, running both ways rows 6 feet apart, as deep as possible, and if not deep enough, subsoil and dig out to 15 or 18 inches with spade or shovel; then fill in with well-worked manure to about 10 inches of the top; plant crown on top of manure and cover lightly with earth. Keep all weeds down first year, and at each working fill in a little soil, and in the fall cover with manure, and as soon as weather in the following spring will permit, ridge up as high as you can with double plow and rake off smooth with rake. Any crop that can be cultivated, such as corn or potatoes, can be grown between the rows.

Barr's Mammoth. A fine large sort, grown largely for the Philadelphia market, where it is a favorite. The stalks are often an inch in diameter, and retain their thickness nearly to the top. Although large, it is tender and of fine flavor.

Conover's Colossal. A standard kind of first quality; tender and high flavored.



Barr's Mammoth Asparagus

Columbian White. Very fine, vigorous grower, and claimed to produce white stalks without hilling up. We hardly think that it would be clear white unless hilled, but think that it worthy of trial by all Asparagus-growers

Giant Argenteuil. A new French variety that makes crowns strong enough for cutting before any other sort and yields enormous crops of mammoth tender stalks.

Palmetto, or French. Southern origin; ten days earlier than other kinds; valuable for home or market; largest, tender; regular growth. One of the best.

Rhubarb or Pie Plant

A very desirable vegetable; comes early in the spring. The large stems of the leaves are used for pie-making and stewing. It is also a paying crop for market, as it comes in when apples are scarce and high, and takes their place for tarts. It should be planted on very rich ground, and well manured every fall. It should be planted, for market purposes, 4 feet each way in the rows. There are several varieties grown, but we consider Myatt's Linnaeus as the best, and it is the only kind we grow.

Myatt's Linnaeus. An extra-early, good variety; large and tender, with delicate flavor.

Horseradish

Every home garden should have Horseradish. It is also a very profitable crop to grow for market. It should be planted in good, rich soil early in the spring. It is grown from small roots cut 3 to 4 inches long, and planted about 6 inches from the top of the ground. It should be taken up in winter, and small side-roots used for planting and large roots stored away for market.



ORNAMENTAL DEPARTMENT

While most people appreciate well-arranged and kept grounds, large or small, many fail to realize that they can have equally fine grounds. These have had a few shrubs or roses growing in thick turf, with no attention given to pruning or cultivation. Under such circumstances, good results cannot be expected.

Aside from the pleasure of having fine trees, shrubs, vines and flowers in the grounds surrounding a home, few realize how much these add to the commercial value of the place. A purchaser having to decide between a house with bare and unkempt grounds and one surrounded by fine ornamentals, invariably chooses the latter at a marked advance in price, because he sees that he will at once enjoy what it would otherwise take some years to secure. Sagacious men are led by a knowledge of these facts to plant fine trees and shrubs about vacant lots they are intending to put upon the market. Such lots readily secure purchasers at good prices, when the bare grounds go begging for buyers. The planting of trees and shrubbery about the home grounds has, therefore, a strongly practical side.

HOW TO PLANT

Do not make the mistake of planting at random all over the grounds. A fine, well-cut lawn is one of the handsomest features of a place. Trees may be planted along a lane or avenue leading to the house, or dotted about the lawn on lines radiating from the house. This will secure light and air, with good views from the house. Upright shrubs and roses should be planted in beds, each class by itself, about the borders of the grounds. These beds should be well cultivated and the plants annually pruned. When the growth of the plants has made them very thick, some should be taken out. It will not do to plant so little that years must elapse before a fine effect will be produced. A surplus should be planted at first, and this gradually be taken out. Vines should be planted near to and allowed to climb upon and about the house, or they may be trained on posts, arbors or stakes, placed in suitable locations on the lawn.

WHAT TO PLANT

A detailed list of desirable ornamental trees and shrubs would be little less than a recapitulation of our entire list; but as few have room for all, we here present a list of the most desirable in each class and refer the reader to the proper place in the catalog for descriptions of them.

Flowering Trees. May—Magnolias in variety, Horse-chestnuts, Tulip Tree, Flowering Cherry. June—(*Catalpa speciosa*), Laburnum, Lindens in variety, (*Paulownia imperialis*).

Trees Valued for Their Form and Foliage. Cut-leaved Weeping Birch, Ginkgo, Weeping Mountain Ash, European Linden, White-leaved European Linden, Norway Maple, Purple-leaved Beech, Teas' Weeping Mulberry.

Evergreen Trees. Norway Spruce, Golden Arborvitae, American Arborvitae, Silver and Balsam Firs, Colorado Blue Spruce, Deodar Cedar.

Upright Flowering Shrubs. April—Japan Quince, Dwarf Double-flowering Almonds, Spireas, Lilaes in variety. May—(*Hydrangea arborescens grandiflora alba*). June—(*Dutzia gracilis* and *D. crenata fl. pl.*), Snowball, Weigelas in variety, *Syringa*, *Calycanthus*. July—Anthony Waterer Spirea. August and September—Altheas in variety, (*Hydrangea paniculata grandiflora*).

Roses. Climbing and Moss, blooming in May and June; Hybrid Perpetual and Perpetual Moss, blooming at intervals and Tea Roses, blooming constantly.

Deciduous Trees

We invite special attention to this select list of trees, so well suited to the lawn and yard, or as shade trees for streets in cities or towns.

Beech

Purpled-leaved. Foliage deep purple in the spring, but under our hot sun and in dry seasons it loses much of its color. For

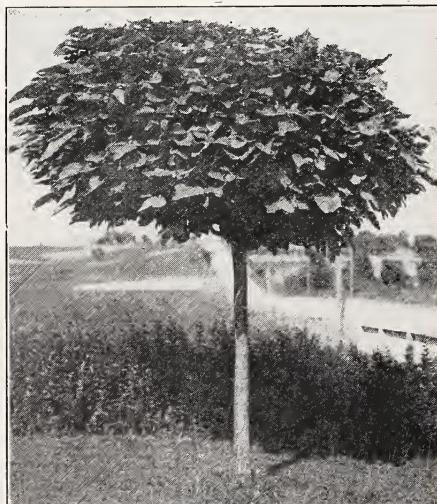
the Northern States it is a very desirable tree.

American. One of the finest American trees.

Catalpa

Speciosa. This desirable and attractive tree is now widely known. It is planted for shade, also for its blossoms, and on account of its value as a timber tree. Whole tracts of land have been planted in the West for this purpose, as it is a very rapid grower, and found to be very desirable for railroad ties, etc. "Massive in all its proportions, straight and rigid, it looks like a production of the tropical zone; yet it seems to be entirely hardy, with its immense leaves, sometimes lobed, velvety brown when they first appear, and changing into dark green, followed by immense panicles of flowers, containing sometimes between three and four hundred buds and blossoms, contrasting finely with its dark, massive foliage. It may be truly called a regal tree."

Bungei. One of the most attractive of trees. It forms a perfect half-globular or umbrella head, with foliage of a deep green color, and with great precision, making a beautiful roof of leaves. A most striking and ornamental tree upon the lawn.



Catalpa Bungei

Dogwood

Common. A small-sized native tree of great beauty when in bloom. Floral covering (incorrectly flowers) large, pure white, followed by brilliant scarlet fruit in autumn.

Pink. Similar to the Common except that its flowers are beautiful pink. The two varieties planted together make a charming combination.

Elm

American, or White. A native tree of large size, with spreading head and graceful, drooping branches. Of all trees, no other, perhaps, unites in the same degree majesty and beauty, grace and grandeur, as this one does. It flourishes everywhere and deserves to be more generally planted.

Ginkgo. Maidenhair Tree

A good lawn and street tree; of singular habits, combining those of the conifer and deciduous tree, with leaves resembling the maidenhair fern.

Horse-Chestnut

Common White-flowered

A handsomely formed tree, with very attractive flowers; succeeds well in the Northern States and in the elevated portions of the Southern States, but in many places in the South its foliage burns under the hot sun.

Red-flowered. A superb tree in foliage and flowers; the foliage is darker green than the white, and the flowers showy red, coming later. Very desirable.

Judas Tree. Red Bud

C. Canadensis. A very ornamental tree of small size, with heart-shaped leaves, and is covered with a profusion of delicate pink flowers before the foliage appears.

Japanese. Recently introduced from Japan. The flowers are larger than the above species, and a light rose-color. It is entirely hardy and very beautiful.

Kentucky Coffee Tree

A large-growing tree, with rough bark, stiff, blunt shoots and feathery foliage.

Laburnum. Golden Chain

A very ornamental small tree. A native of Europe, with smooth, shining foliage, bearing a profusion of drooping racemes of yellow flowers.

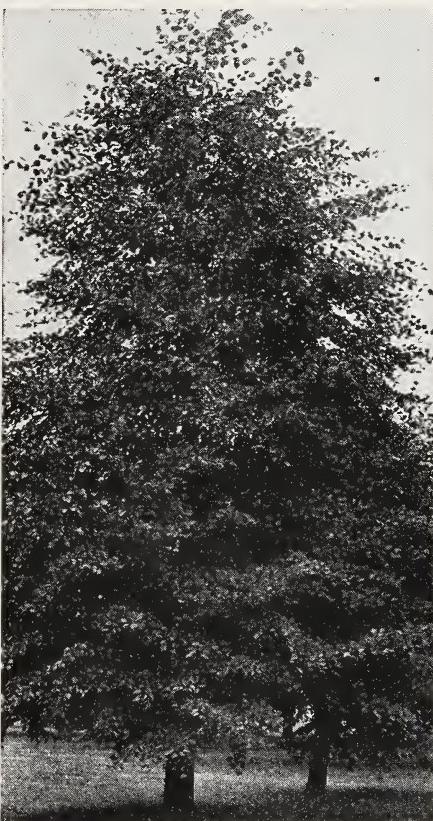
Linden

All the Linden trees are suitable either for the adornment of the home grounds or for use as street trees in the city. It is this tree which is planted along the famous street in Berlin, "Unter den Linden."

American Basswood. A large, native, rapid-growing tree, with large leaves and fragrant flowers; fine for street or lawn planting. Is becoming very popular, and deservedly so.

European. A fine pyramidal tree, more compact in its habit than the above, but does not attain so large a size. A very popular tree.

White-leaved European. A vigorous-growing tree; its handsome form, growth and foliage render it worthy to be classed amongst the best of our ornamental trees.



White Leaf European Linden

Mountain Ash

European. A small tree, with shining, pinnate leaves and large cymes of white flowers, followed by clusters of bright red fruit.

Maples

Silver-leaved. A hardy, rapid-growing, native tree, attaining a large size; valuable for producing a quick shade; fine for street and park planting, for which purpose it is planted more largely than any other tree.

Norway. One of the most beautiful and desirable trees known. Foliage broad, deep green, shining; its compact habit and stout and vigorous growth render it one of the most valuable trees for street or lawn planting.

Sugar. A well-known native tree, of stately growth, fine form and foliage; very desirable as an ornamental and shade tree.

Schwedler's. This beautiful Maple of recent introduction is attracting considerable attention; it is of the Norway family and of about the same habit of growth; its handsome, purplish crimson leaves in May and June, changing to a bronze as they mature, are much admired.



Norway Maple



Pin Oaks Planted Eighteen Years—16 inches in Diameter
Planted on our home grounds.

JAPAN MAPLES

Mostly dwarf habit; several kinds of weeping and cut-leaved, with brightly colored foliage, red, purple, etc. These are indeed remarkable for beauty, and, wherever planted, give perfect satisfaction.

Pin Oaks

Quercus palustris. A tree of especial grace and beauty; it is the most popular of all Oaks; unsurpassed as lawn specimens, admired for avenues, and withstands well the unnatural conditions of our cities. As the tree grows, the branches droop, giving it a peculiarly beautiful and characteristic outline. The leaves are deep green, glossy and finely divided, flaming to orange and scarlet in the fall.

Red Oak. (*Quercus rubra*, L.) A large native tree, with deeply cut, bright green leaves. It is a good grower and not particular about the soil. In autumn the foliage turns a rich purplish-crimson, that is scarcely surpassed in brilliancy by any other tree.

Sweet Gum

A fine ornamental tree, the foliage resembling that of the Maple; corky bark; leaves change to deep crimson in autumn.

Tulip Tree

A magnificent native tree; large, smooth, shining leaves; flowers tulip-shaped, greenish yellow; fine for shade; difficult to transplant except when of small size.

Platanus. Buttonwood

Oriental Sycamore. A tree of the largest size, growing rapidly; very ornamental and entirely hardy. The mottled trunk is a very beautiful feature of the tree.

Poplar

Carolina, or Cottonwood. A large-sized tree, of remarkably rapid growth.

Lombardy. A tall, pyramidal, compact growing tree; rapid grower and very hardy. Widely planted in the southern part of Europe.

Peach

The three varieties described below are all very attractive, and their effect is very pleasing when all are grouped together.

Double White-flowering. Flowers pure white and very double.

Double Rose-flowering. Flowers double,

pale rose colored; resemble small roses; very pretty.

Double Red-flowering. Flowers semi-double, bright red; very fine.

Texas Umbrella Tree

It assumes a spreading head, resembling a gigantic umbrella. A desirable shade tree, but not entirely hardy here.

Willow

Golden Bark. Handsome; a valuable variety for winter effect, the bright colored golden bark contrasting harmoniously with other vegetation.

Weeping Trees

There is a grace and charm about Weeping Trees which cannot be surpassed by any other form, and they add a distinctive touch to the home grounds.

Birch

Weeping Cut-leaved. A charming tree in the Northern states, but does not show so much beauty in the South, except in very favorable locations. It is of very graceful, drooping habit, silvery white bark, and delicately cut foliage. Trees liable to sunscald.

Cherry. *Cerasus*

C. Japonica. The famous ornamental Cherry of Japan, where it is cultivated in many forms. Some of the flowers are full double. One of the handsomest flowering specimen trees in cultivation, and even when not in bloom is a most beautiful adornment to the lawn.

Dogwood

Weeping. This valuable tree is among the earliest bloomers, and its beautiful white blossoms in spring, and red berries in fall, make it one of the handsomest ornaments for the front yard or lawn that can be planted, while it presents a dense and beautiful green foliage during the entire growing season. No one should fail to secure one of these hardy, truly ornamental trees.

Mountain Ash

Weeping (*Sorbus aucuparia pendula*). Branches of this distinct variety are of a straggling, pendent habit; a rapid grower, but is not satisfactory in the South, and is liable to sunscald.

Mulberry

Teas' Weeping. This is one of the most graceful and hardy among the weeping trees, and has only to be known to be appreciated; the foliage is a beautiful, glossy green and

very abundant, and the tree a rapid grower. No weeping tree is so well adapted to our Southern climate as this, or gives such general satisfaction.

Willow

Common Weeping. One of the most graceful and beautiful of the weeping trees; it is of rapid growth, attaining a very large size, showing its great beauty in damp or moist soils, but grows fairly well in any good soil.



Tea's Weeping Mulberry



Evergreens as Beautifiers

Evergreens

Arborvitae

American. Sometimes called White Cedar. A well-known, native species of great value, forming an upright, conical tree of medium size. Valuable for screens and hedges.



Arbor-Vitae

Berckmans' Golden (*Biota aurea nana*). Very dwarf, compact and symmetrical habit; a perfect gem for small gardens or cemetery lots. It far surpasses, in every way, its parent, the old *Biota aurea*. For window-boxes and vases this plant is most effective. It is certainly desirable where it is too cold for palms and other decorative plants.

Chinese Golden. This is the most elegant and charming, and justly becoming the most popular of the Arborvitae; the beautiful golden tint of its foliage and the compact and regular outline of its habit render it unusually attractive.

Siberian. A well-known, popular variety, very dark green in color and compact in growth. Outline regularly conical; very hardy.

Pyramidalis. Upright. A remarkably erect form, dark green, compact and very desirable, and as conspicuous as the Irish Yew.

Cedrus

Deodara (Himalayan, or Deodar Cedar). The Great Cedar of the Himalayan Mountains. A stately tree, attaining a height of 50 to 75 feet; foliage glaucous green; branches feathery and spreading; perfectly adapted to this climate. We grow this very largely.

Cypress

Lawson's. From California. A large, graceful tree, having elegant, drooping branches; leaves dark, green, tinged with a glaucous hue; one of the finest of its class.



Nordman's Silver Fir

Fir

Balsam (Balm of Gilead). Well-known and popular; very pretty when young. The mature tree is of handsome shape, with long, dark green "needles," and is the most fragrant of all evergreens.

Nordmann's Silver. A rapid grower; regular in outline; foliage massive, dark green; one of the finest of the Silver Firs.

Juniper

Juniperus Hibernica. Irish Juniper. Columnar in habit and quite compact in growth, and on this account useful in formal gardening and wherever a break in rounded lines is wanted. Foliage bluish-green. Likes a cool climate.

J. Sabina. Savin Juniper. A dark, rich green Juniper of low, spreading habit. Splendid for where a dwarf plant is wanted in beds or groups or in rock gardens.

J. Virginiana elegans. Golden-tipped Cedar. The green foliage is beautifully tipped golden, making a striking combination.

tion in itself, as well as in contrast with other evergreens. Tall and slender in habit.

J. Virginiana glauca. Blue Virginia Cedar. Beautiful silvery-blue foliage. Grows tall and somewhat slender, developing into a pleasing specimen. Very popular.

Pine

Austrian. From Central Europe, growing over 100 feet high. Leaves long, stiff and very dark green. Hardy everywhere, and one of our most valuable conifers for wind-breaks, belts, etc.

White. An old, well-known native tree, of rapid growth, and entirely hardy. Leaves rather long, slender and slightly glaucous.

Buxus. Box

The neat, glossy foliage of the Box has gained for it thousands of admirers and it well deserves the distinction.

GLOBE-FORMED BOXWOODS

These are round specimens and perfect in every way. Very desirable for vases or for formal planting.

Sempervirens. Common Tree Box. A very large shrub or small tree, with thick, leathery, dark shining green leaves. Both the



White Pine

species and its numerous varieties are of the greatest importance in gardening.

Pyramids. Conical specimens of excellent form for producing immediate effects. We have them in tubs as well as growing in the open ground, making it possible to move plants out of the regular season. 2½ feet to 4 feet.

Standards. Perfect specimens of tree-form plants. Straight stems with round, well-developed heads.

Suffruticosa. Dwarf Box. This well-known and highly appreciated old-fashioned shrub is of the greatest importance for edging walks, etc.

Retinospora

Plume-like (Japan Cypress; *R. plumosa*). A very compact-growing variety, with small, light green leaves and short, slender branches; quite hardy.

Golden-tipped, Plume-like (*R. plumosa aurea*). A very striking and desirable plant for this climate, the tips of branches showing a beautiful golden yellow hue.

Pisifera (Pea-fruited Retinospora). A small tree, slender in growth, with elegant, feathery effect. It is a hardy, graceful and rapid-growing evergreen, with yellowish green foliage marked with glaucous lines below.

Spruce

Norway. A European species, of very rapid, elegant and lofty growth, and when it attains the height of 15 or 20 feet the branches assume a graceful, drooping habit; very hardy.

Koster's Blue Spruce. The brightest Blue Spruce obtainable. Known to almost every one, and looked upon as the very choicest evergreen cultivated. Ours are grafted to secure the richest color—don't get seedlings.



Koster's Blue Spruce

Douglas. Notwithstanding the fact that the form of this species peculiar to the Pacific Coast is unreliable here, the Rocky Mountain variety has proved hardy and beautiful. Dark green.

Hemlock. One of the hardest and handsomest trees; branches drooping; foliage delicate, retaining its color well through the winter; it also makes a highly ornamental hedge.

Euonymous

Euonymous (*E. Japonica*). An upright, attractive, evergreen shrub, with compact branches and rich, dark green foliage. Splendid for hedges, specimens, or landscaping.



Evergreens

Cerasus

Carolina Cherry

Cerasus Caroliniana (*Prunus Caroliniana*). This well-known hardy evergreen is desirable as a single specimen and for grouping, making a most effective background for landscape work. Can also be pruned into

formal shape. We offer a fine stock of thrifty, transplanted plants. As this plant is difficult to transplant, it is always desirable to defoliate and cut back severely.

Mahonia. Holly-Leaved Barberry

Mahonia Aquifolium (*Berberis*) Handsome foliage similar to a Holly (bright glossy green in the growing season, turning in the autumn to rich red and bronze shades. Persistent through the winter. The yellow blossoms in April are very attractive. Locate it where ground is deep, rich and shaded.

M. Japonica. Japanese Holly-leaved Barberry. (3 to 4 ft.) The glossy, green foliage, with the pointed edges to the leaf, like the Holly, remain the same dark green color summer and winter. In April the bright yellow racemes of flowers are decidedly showy, followed by clusters of porcelain-blue berries, resembling small grapes.



California Privet

Hedge Plants

Japan Hardy Lemon

This is the coming hedge plant for defensive as well as ornamental purposes. It is hardy as far north as New Jersey, and, if planted in good soil, an impenetrable hedge can be had three years from planting. Requires but little trimming after the third year. So far it has been free from insect depredations. In early spring, when covered with myriads of white flowers, nothing is more attractive; and, while not an evergreen, the vivid green wood makes it appear bright during winter. Plants may be set two feet apart.

Privet

California. A vigorous, hardy shrub, of fine habit and foliage, nearly evergreen.

Magnolias

Tripetala (*Umbrella Tree*). A small-sized tree, of rapid growth; immense leaves; flowers creamy white, 4 to 6 inches in diameter.

Grandiflora. This magnificent Southern evergreen may be called the Queen of the Magnolias. It is really a grand tree, but, unfortunately, too tender to stand the winters well north of the Potomac, and even the climate along the mountains of Virginia is rather too severe for it to do well; but east of Richmond and south of the James River it flourishes finely. The tree is of rapid and handsome growth; leaves 8 to 10 inches long, which are retained the whole year; flowers large, white and very fragrant.

Soulangeana (*Hybrid Magnolia*). Large and distinctly marked purple and white flowers. Very handsome. Large foliage.

Grows in almost any soil, and is very patient of pruning; makes a desirable ornamental shrub as well as hedge.

One of our most enterprising citizens has planted about thirty miles of California Privet hedge around Richmond, and considers it one of the best plants for this purpose. This hardy shrub is used almost exclusively in the North for hedging purposes.

Amoor River. The most desirable of all broad-leaved evergreens where a tall hedge is desired. Growth very rapid; adapts itself to any soil not too arid or a swamp. If properly treated, a good hedge may be expected in two years after planting. Set plants 12 inches apart in ordinary soil, but in very rich land 18 to 24 inches distance may be given.



Flowering Shrubs and Hardy Plants

Almond Dwarf

Double Rose-flowering. A beautiful small shrub, producing an abundance of small, double, rose-like flowers, closely set upon the twigs before the leaves appear. Very attractive.

White - flowering. Produces beautiful, double, white flowers in April.

Althea Hibiscus Syriacus

Amplissima. Double dark red.

Anemonaeiflorus. Double rose.

Jeanne d'Arc. Double pure white.

Rubis. Single clear red.

Coelestis. Single blue.

Ardens. Double violet.

Abelia

A. grandiflora (*A. rupestris*). Hybrid Abelia. One of the most beautiful shrubs in cultivation. The graceful arching stems are clothed with dark glossy leaves, which are evergreen in the South and tardily deciduous in the North. Flowers white, tinged with pink, about an inch long, borne in profuse clusters from early summer until

checked by frost. Probably of garden origin.

Bamboo

Japanese. This is a very attractive ornamental; grows to an immense height. We have a large stock—direct importation from Japan—which will produce most effective results in the garden.

Barberry Berberis

Purpurea (Purple-leaved Barberry). A well-known, serviceable shrub, differing from the common Barberry in its deep purple leaves. It is doubtless the best dark-leaved shrub in the entire list, and is easily grown in any good soil. During May, when in bloom, the contrast is especially noticeable.

Thunbergii (Thunberg's Barberry). It is a native of China, but was introduced from Japan. It forms a compact bush 3 to 4 feet high, with neat little leaves that change to rich scarlet in autumn. The abundance of bright red fruit is exceedingly attractive. It bears shearing well and makes a dense hedge.

Butterfly Bush

Very hardy. Blooms the first season. Flowers from early summer until late frost. Rich, striking color. Splendid for cutting. Will thrive anywhere. This bush attracts butterflies in large numbers.

Calycanthus. Sweet-scented Shrub

A well-known native bush, the young wood of which has a strong aromatic odor; foliage luxuriant, and the rare chocolate-colored blossoms are delightfully fragrant; blossoms in May and at intervals during summer.

Crape Myrtle

Pink. Upright growth, large open flower clusters. One of the most profuse bloomers.

Purple. A grand sort, producing immense quantities of bloom of a rich purple color.

Red. A very dark-shaded variety; in our opinion the very best of all.

White. This is quite scarce and very lovely. A most desirable sort.

Deutzias

Gracilis (Slender-growing Deutzia). Of small size; light green foliage; delicate, graceful, white flowers. Fine for forcing.

Double-flowering (*D. crenata flore pleno*). From Japan. Flowers double, white, delicately margined with pink. This is deservedly one of the most popular and desirable flowering shrubs, and no collection can be complete without it.

Double White. Produces a profusion of double, pure white flowers; similar in habit to the preceding.



Deutzia Crenata

Pride of Rochester. Origin, Rochester, N. Y. Large, double, white flowers, the back of the petals being tinted with rose; excels most of the old kinds in flower and habit. Early and handsome.



Berberis Thunbergii

Exochorda

Grandiflora. Japanese origin. A superb shrub, furnishing clouds of bloom in May. The flower is large, pure white, in racemes of five or six, with spoon-shaped petals, which are very narrow and stand apart at the base. The bush is large-growing, attaining sometimes 10 feet in height and nearly as broad; perfectly hardy.

Fringe

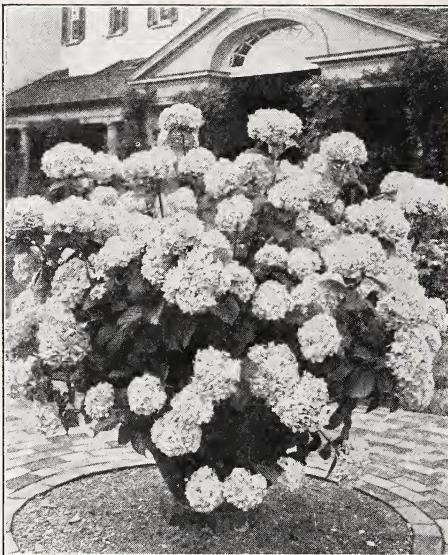
White. A small native tree or shrub of roundish form, with large, glossy leaves and drooping racemes of pure white flowers having narrow fringe-like petals; blossoms in May or June. Superb lawn tree.

Purple (Smoke Tree; Venetian Sumac). An elegant, ornamental tree or large shrub, with curious hair-like flowers of pale, purplish color, that cover the whole plant.

Forsythia

Suspensa. Drooping Golden Bell. Graceful drooping form highly effective to plant on banks or where the slender branches can trail their full length. It blooms in profusion in April.

F. viridissima. This is the one most often found in cultivation. It is of stiffer, more bush-like growth than the other. The flow-



Hydrangea

ers are a shade lighter yellow, and they open about the third week in April. Leaves a little larger and dark green.

Hardy Phlox

No class of hardy plants is more desirable than the Perennial Phloxes. They will thrive in any position, and can be used to advantage in the hardy border, in large groups on the lawn, or planted in front of belts of shrubbery, where they will be a mass of bloom the entire season.

Hydrangeas

Large-panicked (*Hydrangea paniculata grandiflora*). This is one of the finest of all shrubs, growing 8 to 10 feet high, producing immense pyramidal panicles of white flowers more than a foot long; blooms in August and September; indispensable.

Arborescens grandiflora alba. A recent introduction of great value. Blooms are of very large size; snowy white. A valuable acquisition, as it begins to bloom in April and lasts almost the entire summer. In form, the panicles are similar to the tender Hydrangeas.

TENDER HYDRANGEAS

Thomas Hogg. Best white-flowering variety of the Hortensis group. Flowers last several weeks; at first slightly tinted green, becoming of the purest white, completely covering the plant.

Otaksa. An improved variety of Hortensis; flower-heads very large; pale rose or blue, according to soil. This variety is extensively used in growing in pots or tubs.



Hardy Phlox



Field of Peonies

Lilacs

Named Varieties

Marie Legraye. One of the best single white varieties; large trusses.

Mme. Casimir Perier. Double white.

Charles X. Large panicles, reddish purple.
President Grevy. Large, double, blue.

Souvenir de L. Spath. Large, purplish red.

Japan Lilacs

A fine novelty, attaining the size of a tree, with large, deep green, glossy foliage, and immense clusters of elegant, fragrant flowers late in the season. It is undoubtedly one of the best acquisitions of later years.

Japan Quince

Produces bright scarlet flowers in great profusion in the early spring; very attractive and hardy; one of the very best hardy shrubs in the catalogue.

Peonies, Herbaceous

A very showy and most useful class of hardy plants; will flourish in any section. They grow and flower well in almost any soil with very little care, but the flower will be finer and colors brighter if given a deep, rich loam, well manured. Even when not in bloom the peony is a distinct ornament to the garden, as it forms a beautiful bush.

Duke of Wellington. Sulphur white, flower large, perfectly shaped.

Festiva Maxima. Pure white, finest and largest of all.

Jeanne d'Arc. Large, soft pink flower, center sulphur white with brilliant pink carmine spotted, fragrant.

Louis Von Houtte. Bright red, late mid-season.

Plum

Purple-leaved (*Prunus Pissardi*). One of the very best small trees or shrubs of recent introduction; the foliage is a beautiful red-purple, changing to a deep black-purple; the hot sun has no ill effect on its rich colors; it remains beautiful until frosts come, something unusual in purple-leaved plants. By far the best of its kind; exceedingly hardy and very easy to transplant.

Double-flowered. Of recent introduction from China. A very hardy shrub; flowers semi-double, of a delicate pink, closely set along the branches, forming a compact spike. Very pretty and desirable.

Spirea

Anthony Waterer (*Crimson Spirea*). Bright crimson flowers. It has a very dwarf and dense growth; blooms all summer and fall; it also makes a beautiful pot-plant.

Billardii. Bright rose-colored flowers; blooms nearly all summer; desirable.

Plum-leaved (*Bridal Wreath*). A very beautiful variety; flowers pure white, small and very double; blooms very early.



Snowball

Spirea—*Continua*

Reevesii. A very pretty sort, producing clusters of white flowers that cover the whole plant.

Van Houttei. One of the most attractive of the newer Spireas, blooming freely and entirely hardy; flowers pure white.

Snowball

Common. An old and well-known shrub, bearing large balls of pure white flowers.

Japan (*Viburnum plicatum*). A rare and exceedingly beautiful species from China. Flowers in large, globular heads; pure white, hanging long on the bush. A very choice and desirable shrub.

Snowberry

White Snowberry. The pure, white berries of this ornamental shrub are well known to all. Plant in groups for the best results.

Red Snowberry. In late autumn this plant is well fruited with clusters of small red berries. Very ornamental. A graceful, pendulous plant in habit.

Syringa. Mock Orange

A rapid grower; flowers large, white and fragrant.

Vitex. The Chaste Tree

Vitex agnus-castus. Chaste Tree. Leaves compound, consisting of 5 to 7 narrow leaflets, dark green above, grayish downy beneath, with a strong aromatic odor when bruised. Flowers lilac or violet-purple, disposed in racemes during late summer.

Weigela

Rosea, rose-colored. An elegant shrub with beautiful rose-colored flowers; hardy and of easy cultivation. Should be in every collection.

Eva Rathke. A charming Weigela. Flowers brilliant crimson of a beautiful, distinct clear shade.

Candida. Healthy, attractive foliage and pure snowy white blossoms. Splendid.



Spirea Van Houttei



Tea or Everblooming Roses

Roses

Roses are the most beautiful of flowers, and they are among the easiest to raise in perfection. They require plenty of manure and good cultivation. Old and decayed branches, and at least half the previous season's growth, should be cut away early each spring, and a little cutting back after the first blooming will insure more late flowers. The so-called tender Roses must be carefully protected in winter by covering them with leaves and evergreen boughs; and the hardy sorts will be rendered more vigorous and productive of fine flowers if they, too, are similarly protected.

Hybrid Perpetual

Alfred Colomb. Brilliant carmine-crimson; very large, full, and of fine globular form; extremely fragrant, and in every respect a superb sort; green wood, with occasional pale greenish thorns; foliage large and handsome. One of the most useful of all sorts for general cultivation. Budded and on own roots.

Anne de Diesbach. Carmine, a beautiful shade; very large; a fine garden sort.

American Beauty. A grand rose for either forcing or outdoor culture. Its very double flowers are of a deep crimson color and very fragrant; it is of full and very perfect form, with the petals finely imbricated; a constant bloomer and strong grower. Very desirable in every way; its rich "June-Rose" scent would alone command it, to say nothing of its many other good qualities.

Caroline de Sansal. Clear, delicate flesh-color; fine form; one of the best of its color.

Coquette des Alpes. White, tinged with carmine; very fine; a very free bloomer.

Coquette des Blanches. Pure white; very beautiful. We think this the best pure white Hybrid Perpetual.

General Jacqueminot. Brilliant, velvety crimson; large, showy, and a fine grower; a magnificent variety.

Madam Alfred Carrière. Extra long, full flowers, very double and sweet; color rich creamy white, faintly tinged with pale yel-

low; a strong, hardy grower and free bloomer.

Madame Charles Wood. Extra large, full and double; color deep rosy crimson, sometimes brilliant scarlet; an early and continuous bloomer.

Madame Plantier. Pure white; above medium size, full; produced in great abundance early in the season. One of the very best hardy white roses. An extra fine rose for cemetery planting, where it will thrive without care.

Magna Charta. This grand rose is a strong grower, a very free bloomer, and has magnificent foliage; color bright pink, suffused with carmine; very large, full and of excellent form.

Paul Neyron. Deep rose-color; splendid foliage and habit, with larger flowers than any other variety; a valuable acquisition.

Prince Camille de Rohan. Deep velvety crimson; large; moderately full; a splendid rose.

White American Beauty, or Frau Karl Druschki. This magnificent variety has taken first prize at all the great flower shows of Europe. Pure snow-white, with long buds and immense, perfectly double flowers, 4 to 5 inches across, with wax-like petals and very durable. It is one of the most continuous flowering roses in this excellent class. The bush is a vigorous grower, of upright habit and luxuriant foliage. Hardy everywhere that roses grow.



Kaiserin Augusta Victoria

Hardy Climbing Roses

Baltimore Belle. Pale blush, nearly white; double; best white climbing rose.

Crimson Rambler. Especially adapted for covering trellises, training to side of the house, or can be cut back and grown in bush form.

Dorothy Perkins. The greatest climbing rose ever introduced. The flowers are borne in the greatest profusion in large trusses, and are of a most exquisite shade of shell-pink with beautifully quilled petals. The foliage is strong and bright green, and the plant, even when not in bloom, is a handsome adornment to the porch.

Greville, or Seven Sisters. Flowers crimson, changing to blush, in large clusters.

Philadelphia Rambler. A great improvement on the old Crimson Rambler, with large clusters of flowers of a more intense crimson. Its season of bloom also is longer.

Queen of the Prairie. Bright rosy red, frequently striped with white; large, compact and globular.

Marechal Niel. Deep yellow; very large; very full, globular; highly scented. Requires careful treatment. It should be severely pruned. The finest yellow rose grown, and the most valuable climber for the South.

Reine Marie Henriette. Large, finely formed flowers; very full and double; borne in clusters and tea-scented; color rich crimson, elegantly shaded.

Tennessee Belle. Dark pink; profuse bloomer and strong grower. One of the best climbing vines of the South.

Yellow Rambler. Flowers of medium size, in immense clusters, often thirty-five to forty clear, distinct yellow roses in a single cluster; very sweet-scented.

William Allen Richardson. A handsome variety of strong growth and climbing habit; rich, coppery yellow, flushed with carmine; large, full and fragrant.

Wichuraiana. A distinct and valuable variety from Japan. It is a low, trailing species, its stems creeping on the earth almost as closely as the ivy. The flowers are produced in the greatest profusion in clusters on the end of every branch, after the June roses are past, from the first week in July throughout the month. They are pure white, $1\frac{1}{2}$ to 2 inches across, with yellow stamens, and have the strong fragrance of the Banksia rose.

Hybrid Tea Roses

Duchess of Albany. Quite distinct in color, being of a rich, deep, even pink tint, and the shape is most charming; vigorous, free blooming and fragrant.

Etoile de France. One of the most magnificent new roses introduced in the past few years. It is a strong, healthy grower, quite hardy and a quick and abundant bloomer; makes beautiful, large, pointed buds and extra large, fully double flowers. Color, intense brilliant crimson, very fragrant.

Gruss an Teplitz. This grand rose has proved one of the best and most valuable hardy crimson everblooming roses for garden planting ever introduced. The color is dark, rich crimson passing to velvety fiery red, the very brightest colored rose we know. Flowers large, full and sweet; blooms constantly, throwing up fresh buds and flowers the whole growing season.

Kaïserin Augusta Victoria. An extra fine white rose, faint blended with cream color; very large, full and double, almost perfect in form, and it continues beautiful even when fully expanded; beautiful, glossy foliage. A vigorous grower and very free-flowering, blooming at every shoot.

La France. Delicate silvery rose; very large and full; an almost constant bloomer; equal in delicacy to a Tea rose; the most pleasing fragrance of all roses; only a moderate grower.

Madame Caroline Testout. A beautiful, bright, yet clear pink rose, and very much resembles La France, from which it un-

Hybrid Tea Roses—Continued

doubtedly originated. It is of more sturdy habit, however, and exceedingly floriferous, and the individual blooms are often much larger than those of La France. It maintains its beautiful color at all seasons; handsome foliage; stout stems; fragrance very delicate.

Meteor. A healthy, vigorous grower, free-blooming, and of a rich crimson color; the darkest of all.

Mlle. Helena Gambier. A grand ever-blooming rose; color, lovely canary-yellow, with deep peachy red center, changing to creamy pink as the flowers open. It makes a neat, handsome bush, blooms very quickly and abundantly all through the season, and flowers are large, very double and sweet.

Pink Killarney. A splendid Irish Hybrid Tea rose of wonderful beauty. It is a vigorous grower and perfectly hardy here. It blooms freely, producing large flowers of the most exquisite shade of rich, imperial pink. The petals are of excellent substance and often $2\frac{1}{2}$ inches deep. The fragrance is simply enchanting. Killarney will continue to be a leading favorite.

Rhea Reid. Up until this rose made its advent there had been no red rose that filled the bill as to a summer bedder that produced fine red roses suitable for cut-flower purposes. It grows and blooms freely, and the color is the very richest. This rose will unquestionably make its greatest mark as a summer bedder.

Four Famous Cochet Roses

These are among the very finest hardy everblooming roses in cultivation. They stand at the head of the list, and are not surpassed by any others in beauty or productiveness; and it makes no difference what other roses you have, you want the Four Famous Cochet Roses also. They should be included with every order.

Pink Maman Cochet. This superb rose is well known as a queen among roses, and one of the best and most beautiful varieties ever grown, and quite hardy. The flowers are of enormous size, very full and of great depth and substance. Color, rich coral-pink, elegantly shaded with rosy crimson; have broad, thick, shell-like petals and make superb, long-pointed buds; immense bloomer, continues loaded with buds and flowers the whole season. Deliciously sweet and a hardy, vigorous grower. It ranks among the very finest hardy, everblooming roses.

Red Maman Cochet (Mrs. B. R. Cant). A most valuable, hardy, everblooming rose.

Recommended for garden planting. It is a healthy, vigorous grower, throwing up strong shoots and producing great masses of splendid roses the whole growing season. Flowers are extra large, perfectly double and deliciously sweet. Color, bright rose-red, elegantly shaded and exceedingly beautiful. It is entirely hardy here, though the usual winter covering of leaves or garden litter is always desirable.

White Maman Cochet. A splendid rose; has all the good qualities of Maman Cochet, but is pure snow-white, equally large and fragrant, hardy and productive.

Yellow Maman Cochet (Mlle. Helena Gambier). A grand everblooming rose; color, lovely canary-yellow, with deep peachy red center, changing to creamy pink as the flowers open. It makes a neat, handsome bush, blooms very quickly and abundantly all through the season, and flowers are large, very double and sweet.

Moss Roses

Comtesse de Murinais. Pure white, large; very desirable; the finest white Moss.

Luxembourg. Crimson; fine grower.

Princess Adélaïde. A vigorous grower; pale rose, of medium size and good form; good in bud and flower. One of the best.

Salet. Clear rose color; double; a perpetual bloomer.

White. Pure white; very fine flowers.



Maman Cochet

Tender Perpetual Roses

Bon Silene. Rosy carmine, shaded with salmon; fragrant and very free flowering. Valuable for the buds.

Bridesmaid. Very valuable new Tea rose; a sport from the Catherine Mermet. It is a charming rose, clear, bright pink in color, and much superior to its well-known parent.

Catherine Mermet. Bright flesh color, with the same peculiar luster possessed by La France; large, full and beautiful.

Clothilde Soupert. Medium size; very double and beautifully imbricated like an aster; produced in clusters; pearly white, with rosy lake centers. Liable to vary, producing often red and white flowers on the same plant. Valuable to florists for designs, or as a market pot-plant, being a remarkably free, and constant bloomer and of easy culture.

Coquette de Lyon. A lovely Tea rose. Exquisite canary-yellow; clear translucent texture and delicious perfume; flowers large; fine form; very double.

Devoniensis. Beautiful creamy white and rosy center; large; very full and double; delightfully sweet Tea scent.

Etoile de Lyon. A grand rose for forcing, of superb form and habit; color rich saffron-yellow, brighter in the center; very large and full, blooming profusely; grows vigorously.

Gloire de Dijon. Fawn, with salmon shadings; blooms all summer.



Clothilde Soupert

Helen Gould. Hardy, crimson everblooming rose. This is a remarkably vigorous grower and is continually covered with fine clusters of fragrant roses. This rose needs no protection, even in climates that are severe. The flowers are large, very fragrant and double.

Isabella Sprunt. Bright canary-yellow; large, beautiful buds; valuable for cut flowers; very sweet tea scent; profuse bloomer.

Madame Margottin. Very large; perfectly double; elegantly perfumed; dark citron-yellow, with bright red center; a strong grower and quite hardy.

Madame Joseph Schwartz. White, beautifully flushed with pink. The plant grows with great vigor, and is extremely free with its flowers, which are of medium size, cupped and borne in clusters.

Marie Guillot. Color pure snow-white, sometimes faintly tinged with pale yellow; extra large size; full and double; very sweet tea scent.

Marie Van Houtte. White, slightly tinged with yellow; large and full. In every way a most charming sort.

My Maryland. One of the finest American introductions. It has jumped into popular favor at once, sweeping the decks of both Europe and America clean. The plant is of strong, vigorous growth. Extremely free flowering, every shoot bearing one or more flowers, which are double, of perfect form. Color, glowing intense pink, which lightens up beautifully as the flower expands. Strongly and delightfully fragrant.

Papa Gontier. A popular Tea rose. Very free blooming; long, pointed buds of a glowing carmine-crimson. It is delightfully fragrant.

Perle des Jardins. A beautiful straw color, sometimes a deep canary; very large, full and of fine form. A very free bloomer. One of the finest yellow roses we have in our collection.

Saffrano. Saffron and apricot. A very free bloomer. One of the oldest and best varieties, especially when used in the bud state.

The Bride. A magnificent pure white Tea rose. Flowers large and double, on long, stiff stems, and last a long time in a fresh state after being cut.

Sunburst. This magnificent giant yellow rose is a fine forcer; it stands head and shoulders above all others of its color, and will rank with American Beauty and the Killarneys in value and grandeur. It has long, pointed buds, which can be cut tight for market. The color is orange-copper or golden-orange and golden-yellow; edge of petals lighter; all intense shades, extremely brilliant in effect. It is the yellowest of all

Tender Perpetual Roses—Continued

roses in the everblooming class. Belongs in the class of big roses. The golden-yellow color stays right with the flower until it fully finishes.

Wm. R. Smith, or Maiden's Blush. Have you ever seen the blush of a beautiful maiden? If so, you will readily understand why this rose has been so named. The soft blending of the salmon-pink and the rose-pinks and the beautiful flesh tints in this rose give a singular resemblance to the entrancing flush on a maiden's cheek. Grown by Shellum, the noted Philadelphia florist. A grand garden rose. This rose has become in such demand that it is listed under five distinct names by as many growers. It has large, glossy green foliage; young growth bronzy red.

Climbing Roses**Teas and Hybrid Teas**

Mrs. Robert Peary. Climbing Kaiserin Augusta Victoria. One of the very best in this class; a strong, vigorous grower, throwing up canes 6 to 8 feet high in a season. Flowers extra large and sweet; color rich creamy white, delicately tinted with lemon. Blooms constantly the whole season.

Golden Rambler (Alister Stella Gray). This is a very beautiful rose. The color is rich apricot-yellow, soon changing to pure white, with bright yellow center. The flowers are large, full and fragrant, and it is a most constant and profuse bloomer. Plant near wall or trellis where it can have some shelter and support.

Climbing Meteor. One of the finest bright crimson, hardy, everblooming climbing roses ever introduced; makes exquisite buds and large, beautifully shaped flowers of the true Jacqueminot color.

Climbing Belle Siebrecht. An incessant bloomer, with long, pointed buds, and large, round flowers; color rich deep pink. Hardy, with slight protection.

Climbing American Beauty. Rosy crimson, similar to its parent, the famous American Beauty; flower 3 to 4 inches in diameter and fragrant; finely formed, on long stems. Blooms very freely in May and June, and occasionally during the summer. The plant is a strong grower, making shoots 10 to 12 feet in a season, and perfectly hardy. Foliage of good size, deep glossy green color; does not mildew; is not subject to black spot, and remains on until frost.

Climbing Papa Gontier. A climbing sport of Papa Gontier, retaining its free flowering and other meritorious qualities that have made that rose favorite with many; color, rich red; a beauty.

Climbing Gruss an Teplitz. An exact

counterpart of the bush form of that superb rose, Gruss an Teplitz, except that it is a vigorous climber. A perfect sheet of dazzling crimson when in bloom.

Climbing Helen Gould. Probably no red rose has held its place secure in the hearts of rose lovers for so long a period as has the beautiful Helen Gould. We have now the pleasure of introducing this famous rose in climbing form. Everybody is familiar with the warm watermelon-red color of its charming flowers. This is a grand climber. Be sure and try it.

Climbing Killarney. An exact counterpart of Killarney in every respect except that it is of vigorous climbing habit; deep shell-pink. This will prove a great rose wherever a climber is needed.

Climbing Liberty. A climbing form of Liberty. Color brilliant velvety crimson; flowers of good size and beautifully formed; a superb variety for any purpose, the blooms lasting well when cut; very free flowering. When you see this dazzling rich rose you will never forget it.

Climbing Madame Caroline Testout. A rampant climber. In flower identical with Mme. C. Testout. Beautiful glowing pink. You can't beat it.

Climbing Paul Neyron. Bright, satiny-rose, changing to carnation-pink; fine bud and the flower so large and full as to suggest Paul Neyron, hence the suggestion by some one, "Climbing Paul Neyron."



Crimson Rambler



Clematis Paniculata

Vines and Creepers

Ampelopsis

Veitchii (Japanese Ivy). From Japan; grows rapidly and attaches itself firmly to stone or brick walls; the leaves are small, turning to brilliant red in the autumn.

Clematis. Virgin's Bower

This is unquestionably one of the handsomest classes of vines for covering arbors, trellises, pillars, etc., that has been introduced. They are slender-branched, rapid growers, with handsome foliage and beautiful flowers, ranging in color from white to deep purple.

Henryi. Large; free grower and bloomer; flowers creamy white; one of the best.

Jackmani (Jackman's.) Without a doubt the best yet introduced, and a general favorite; large, velvety, dark violet-purple; strong and hardy.

Mad. Edouard Andre. This is the nearest approach to bright red clematis, and has been called the Crimson Jackmani. The plant is strong, vigorous grower and very free in bloom; color a distinct crimson-red; a very pleasing shade and entirely distinct from all other sorts.

Paniculata. From Japan. Panicles of small, pure white, fragrant flowers borne in great profusion. Very desirable and entirely hardy. Blooms in late summer.

Honeysuckle

Hall's New Japan. Flowers white, changing to yellow; very fragrant. Almost evergreen; in constant bloom; the best.

Japan Evergreen (Woodbine Honeysuckle). Vigorous grower, with numerous white and yellow, fragrant flowers.

Chinese Twining. Flowers red, yellow and white variegated; very sweet. Evergreen.

Ivy

English. A beautiful vine, with dark green leaves, that climbs over brick, stone or wooden walls or chimneys without any support. A hardy evergreen.

Kudzu Vine

A hardy, vigorous vine, growing 40 to 50 feet in a season; native of China and Japan. Flowers violet, blotched with yellow; fragrant; blooms in early summer; very large, heavy foliage.

Wistaria

Chinese. Attains a very large size, sometimes growing 15 or more feet in a season; has long racemes of pale blue flowers in spring and sometimes in autumn.

White-flowering. Like the preceding, except that the flowers are pure white and single.

San Jose Scale

This pest first made its appearance in Virginia about twenty years ago, causing considerable consternation among the fruit-growers. Vigorous steps, however, were taken and the pest controlled. At the first appearance of scale the growers predicted that the orchards generally would be wiped out of existence. In this they were much mistaken, for the orchards that were properly sprayed have materially improved, both in healthfulness and in the quality of fruit produced.

As one large peach-grower expressed it, "the scale was a blessing in disguise." This gentleman states that by properly spraying his orchards and keeping his trees in first-class condition, the quality of fruit produced is much improved as well as the production increased. He claims that the few cents expended on each tree for spraying every year has been of untold benefit.

We cannot impress too strongly on our patrons and fruit-growers generally the importance of spraying and properly caring for their trees if they would make their orchards profitable. As a precaution we recommend the washing or dipping of fruit trees when received from the nursery (dip or wash the bodies and limbs); doing this insures against disease being brought into the orchard. As washes we suggest either lime-sulphur solution, soluble oil, whale-oil or Takanap soap.

We use extra care in seeing that all stock leaving our premises is thoroughly fumigated, under directions as prescribed by the State Entomologist.

Injurious Insects

The rapid increase of insects injurious to fruit and fruit trees necessarily compels the horticulturist to obtain a knowledge of their habits, that he may provide means to oppose their ravages; otherwise, he must remain at their mercy, and find that paying crops become more and more uncertain. The limits of this catalog allow space for the enumeration of only the most destructive and abundant species which infest the orchards and vineyards, and the best remedies as suggested by leading entomologists.

APPLES

Apple Worm (*Carpocapsa pomonella*, or Codling Moth.) Spray with arsenate of lead at the rate of two pounds to fifty gallons of water, and bordeaux mixture (four pounds of lime, six pounds of bluestone, fifty gallons of water), after the blossoms have fallen, and before the calyx lobes close. Repeat in one week. It is generally conceded that earlier or later sprayings than mentioned above are of no value against the first brood, when dealing with the codling-moth. It is necessary, therefore, to spray just after the petals fall and before the calyx lobes close, in order to fill this cup with poison at the only time it is possible to do so. A second brood of apple-worms appear from the middle to the last of June, in Georgia—later farther North—and spraying for this brood is advisable in many cases. As a general rule, spray the last week in June, and again two weeks later, with bordeaux-arsenate of lead mixture. Bordeaux, not being strictly an insecticide, does not act against the codling moth, but it is almost well to use it in combination with arsenate of lead to prevent apple scab or other fungous diseases.

Borer (*Saperda candida*). Examine trees in spring and again in June and dig out the grubs with a wire. Then wash the collar of roots and parts of the body with a mixture of lime and sulphur.

Caterpillar (*Clisiocampa Americana*). Destroy nests as soon as they appear in spring by burning, or spray with paris green eight ounces, lime one pound, water fifty gallons.

Spring Canker Worm (*Paleacrita vernata*). Encircle the tree with a canvas belt coated thoroughly with tar or train oil; or, spray with six ounces of paris green and one pound lime to fifty gallons of bordeaux or water.

Woolly Aphid (*Schizoneura lanigera*). For above-ground colonies, wash trees with solution of whale-oil soap or kerosene emulsion. For root-inhabiting colonies, remove the soil to a depth of about three inches, or sufficient to partially expose the roots; open a circle from four to eight feet in diameter, depending on the spread of the roots, distribute three to eight pounds of tobacco dust or use 15 per cent kerosene emulsion. Enough emulsion should be used to saturate the soil to a depth of three or four inches. Recent experiments have shown that kerosene emulsion may be used with success. Tobacco dust is of more value as a preventive and fertilizer. Badly infested trees should receive kerosene treatment.

PEACHES AND PLUMS

Curculio (*Conotrachelus nenuphar*). Spray the trees before the blossoms open, with a solution of arsenate of lead, three pounds;

INJURIOUS INSECTS—Continued

lime, two pounds, to fifty gallons of water. Use bordeaux with arsenate of lead when the blossoms have fallen; ten days later, bordeaux and arsenate of lead. If peach and plum trees are in foliage, use three pounds copper sulphate, nine pounds lime and fifty gallons of water; a stronger mixture will burn the foliage. Then follow with a large hopper made of sheeting and having a spread of ten to fifteen feet, having a slit in same, so that the tree can be encircled; give the trunk a quick blow with a padded club; this causes the curculio to fall. Dump the insects into a jar of kerosene. Jarring should be done daily, beginning at daylight and continuing until 8 or 9 o'clock. It will hardly pay to jar the trees at any other time. Continue the jarring until the orchard is rid of the insects.

Peach Tree Borer (*Sanninoidea exitiosa*). The old method of worming peach trees during winter has been found ineffective, principally because the worms cause too much damage before being removed.

Supposing that we start with an infested orchard; worm the trees in the spring; this will lessen the number of worms that will reach maturity. About July 1 apply a wash to a height of eighteen to twenty inches, allowing it to go well down on the roots. Immediately afterward draw up the earth to the trees, forming a cone six to eight inches above the level. This will force the borer moths to deposit eggs up above the mound of earth. The wash previously applied will help to repel the moths. A second application of deterrent wash, during August, should be applied if the first wash gets thin; that is, keep the bark coated.

The following is an excellent wash for peach trees: One bushel of quicklime, twenty pounds of sulphur, one gallon of coal tar, fifty gallons of water. Mix tar and sulphur in ten gallons of water in barrel, add lime, keep well stirred. When entirely slaked, dilute to fifty gallons.

During the last of October, remove the mound from around the trees and thoroughly scrape and clean the bark. This will kill many young worms and probably some eggs. Now apply the wash again as it may kill many little borers that may be exposed but not actually killed by the scraping process. Worm the trees in the spring for the few worms that may escape the treatment just suggested.

San Jose Scale (*Aspidiotus perniciosus*). This attacks peach, pear, apple, quince, cherry, raspberry, rose and a number of other trees and shrubs. For winter treatment, we would recommend spraying with

lime-sulphur solution. Spray in December and again late in February or early March. For summer treatment we would suggest spraying with kerosene emulsion, one part of emulsion to five of water, or soluble oil, or use the regular strength of lime-sulphur solution, applying this with a brush to the trunks and larger limbs only. None of this mixture should be put on the foliage or young growth.

Other Scale Insects, of which there are several species which are destructive to fruit or other trees, can be eradicated by the use of kerosene emulsion or whale-oil soap.

JAPANESE PERSIMMONS, WALNUTS AND PECANS

Borer (*Prionus*). These bore through the roots and usually destroy the tree; and must be carefully removed. Carefully examine collar of tree in winter and midsummer, and apply lime-and-sulphur wash.

Caterpillar (*Catocala maestosa*). This insect feeds on the leaves of pecans, and is sometimes quite injurious; spray with paris green, four ounces, lime, one pound, to fifty gallons of water.

Pecan Bud Worm (*Proteopteryx Deludana*). Spray the trees, just as the buds are opening, with arsenate of lead, three pounds to fifty gallons of water, and repeat application ten days later. If the worms appear again in June or July repeat the same treatment. This will also help control the pecan case bearer.

Twig Girdlers (*Oncideres cingulatus*). All limbs that have been girdled and have fallen must be burned at once, thus destroying all future broods of sawyers.

GRAPE VINES

Borer (*Prionus*). Its presence is manifested by the unhealthy appearance of the vine. Search must be made at the roots and the grub destroyed.

Flea Beetle (*Haltica Chalybea*). Dust leaves with dry lime.

Grape Curculio (*Coeliodes inaequalis*). Paris green or arsenate of lead solution as a spray, as soon as fruit is set.

Leaf Hopper (*Erythroneura vitis*). Passing with a torch between the rows in the evening and shaking the vines to disturb the insects.

Leaf Folder (*Desmia funeralis*). Kerosene emulsion, or paris green, or arsenate of lead as a spray.

Phylloxera. Various insecticides are recommended, but must be applied below the ground with the aid of specially constructed apparatus.

N O T I C E

If your trees are infected with any insects or fungous diseases, send infected portion to your Experiment Station, your State Entomologist, or United States Entomologist at Washington, D. C., or if you desire to do so, write us and we will recommend such treatment as we deem necessary.

W. T. HOOD & CO.

Old Dominion
NURSERIES
Richmond, Virginia